JOBS FOR A HEALTHIER DIET and a STRONGER ECONOMY



JOBS FOR A HEALTHIER DIET AND A STRONGER ECONOMY:

Opportunities for Creating New Good Food Jobs in New York City

A Report by the NYC Food Policy Center at Hunter College and the City University of New York School of Public Health

August 2013

The New York City Food Policy Center at Hunter College develops intersectoral, innovative and effective solutions to preventing diet-related diseases and promoting food security in New York and other cities. The Center works with policy makers, community organizations, advocates and the public to create healthier, more sustainable food environments and to use food to promote community and economic development. Through interdisciplinary research, policy analysis, evaluation and education, we leverage the expertise and passion of the students, faculty and staff of Hunter College and CUNY. The Center aims to make New York a model for smart, fair food policy.

Table of Contents

Acknowledgements	2
Introduction	3
Rationale and Political Context	4
Box: 1 Definition of Good Food Jobs	6
Profile 1: Osei Blackett	7
Approaches to Creating food jobs	7
Box 2: Seven Approaches to Creating New Good Food Jobs	8
Overview of Food Sector	10
Box 3: The Food System Supply Chain	10
The Food Sector in New York City	11
Table 1 A-C: Changes in New York City's Food Sector, 2001-2011	11
Career Ladders in the Food Sector	12
Table 2: Pay and Levels of Education and Experience Required for Selected Food Jobs	13
Overview of Workforce Development	14
Box 4: Five Redesign Principles to Realign the New York City's Workforce Development System	
Training for Food Jobs	16
Box 5: Approaches to Food Job Training	17
Profile 2: Stefania Patinella	18
Good Food Jobs Provide Three Paths to Health	19
Table 3: New Good Foods Jobs Reduce Food Related Health Problems and Their Economic Costs	319
Profile 3: Johanna Kolodny	20
Good Food Jobs Model Programs	21
New York City	21
Table 4: Selected NYC Food Sector Job Creation Programs	22
Table 5: Assessment of Selected New York City Food Job Creation Programs	24
Job Creation Programs in Other Jurisdictins	26
Profile 4: James Johnson Piett	29
Funders and Financing Streams	
Table 6: Funders and Financing Streams for Good Food Jobs in New York City	31
Profile 5:Tania Lopez	32
Recommendations	33
Recommendations for 10,000 New Good Food Jobs by 2020	33
Recommendations for Creating an Infrastructure to Sustain Good Food Jobs	38
References	40

Glossary of Abbreviations and Acronyms

CSA	Community Supported Agriculture	QCEW	Quarterly Census of Employment and Workers
CUNY	City University of New York	SNAP	Supplemental Nutrition Assistance Program
DOHMH	New York City Department of Health		(formerly Food Stamps)
	and Mental Hygiene	TFPC	Toronto Food Policy Council
EDC	New York City Economic Development Corporation	USDA	United States Department of Agriculture
NYSDOI	L New York State Department of Labor	WIC	Women, Infants and Children Program

Acknowledgements

This report was funded by the New York City Council. All views expressed herein are those of the authors and do not necessarily reflect the positions of the City Council, its members or the employers of the authors.

Many people contributed to this report and we gratefully acknowledge their advice and contributions. We thank Hector Cordero-Guzman, John Mogulescu, Nancy Romer, Emma Tsui, Alissa Weiss, the Restaurant Opportunities Center and the many authors of the reports cited in our reference sections. We thank Hunter College, its President Jennifer Raab and Dr. Neal Cohen, Interim Dean of the CUNY School of Public Health, for their enthusiastic support of the Food Policy Center. We thank Shauna Cagan for the report's graphic design. Despite our efforts to gather up-to-date information from a variety of sources, any report that describes rapidly changing programs and policies across sectors and jurisdictions will inevitably contains misstatements of fact and errors in judgment. We apologize in advance for any such misinterpretations and encourage readers to send corrections and disagreements to info@nycfoodpolicy.org.

Our Research Team

This report was written by Nicholas Freudenberg and Michele Silver and prepared by a research team that included:

Babette Audant is Executive Director of the Center for Economic and Workforce Development and an Assistant Professor of Culinary Arts at Kingsborough Community College, CUNY.

Jonathan Deutsch is Professor and Program Director of Hospitality Management, Culinary Arts, Culinary Science and Food Science at Drexel University in Philadelphia and was Founding Director of Culinary Arts at Kingsborough Community College, CUNY.

Nicholas Freudenberg is Distinguished Professor of Public Health at Hunter College and the CUNY School of Public Health and the faculty co-director of the NYC Food Policy Center.

Lesley Hirsch is Director of the New York City Labor Market Information Service at the CUNY Graduate Center.

Erica Hope is a food writer and researcher at Drexel University.

Jan Poppendieck is Professor Emerita of Sociology at Hunter College and faculty co-director of the NYC Food Policy Center.

Michele Silver is a doctoral student in public health at CUNY and has worked on food policy in New York City and California's Bay Area.

Jessica Wurwarg was director of the New York City Food Policy Center and is an adjunct instructor at the Center for Global Affairs at New York University.

Suggested citation: Freudenberg N, Silver M and the Good Food Jobs Research Team. Jobs for a Healthier Diet and a Stronger Economy: Opportunities for Creating New Good Food Jobs in New York City. New York: New York City Food Policy Center at Hunter College, 2013. The full report and the Executive Summary are available at: http://nycfoodpolicy.org

Introduction

Across the city, state and nation, our food system is coming under new scrutiny for its impact on our health, economy and the environment. At the same time, our local and national economies face unacceptably high rates of persistent unemployment. Can developing new approaches to creating entry-level food jobs that promote health and economic development help to solve these problems? Can the food sector become a setting for innovative intersectoral solutions to several of New York City's most serious problems including high unemployment rates, rising rates of diet-related diseases, enduring inequalities in health and high levels of food insecurity among the poor?

In this report, the New York City Food Policy Center at Hunter College explores the potential for creating "Good Food Jobs" –jobs that pay a living wage, offer safe working conditions, promote sustainable economic development, and make healthier food more accessible to all New Yorkers. The report investigates potential synergies between the need for more good food and more good jobs. It seeks to provide elected officials, city agencies, food businesses and employers, health professionals and workforce development programs with the evidence they need to forge effective policies and programs that will create new Good Food Jobs.

The report calls for the next Mayoral Administration to create partnerships with employers, labor unions, educational institutions and others to produce 10,000 new Good Food Jobs in New York City by 2020. Achieving this goal will require creating new positions as well as upgrading existing food and health jobs by improving skills, pay and benefits and enhancing the nutritional quality of the food produced.

No task is more important for New York City's future than creating new jobs that can reduce unemployment and poverty. As one of the largest and most dynamic sectors in the city's economy, the food production and distribution system provides many entry-level opportunities for low- and moderate-skilled workers, making it a logical and powerful target for creating new jobs for those most challenged by current economic conditions. The food sector also offers career paths that allow those with limited education, recent immigrants, and entrepreneurs with high ambitions but little capital opportunities to build careers. To date, however, many of the jobs in this sector are low-paying, lack benefits and expose workers to unsafe conditions—challenges that any plan to create Good Food Jobs will need to overcome.

Diet-related diseases are a major cause of premature death and preventable illnesses. In addition, food insecurity and hunger threaten the well-being of more than a million city residents, paradoxically often putting them at risk of the lower cost but high calorie diets that also contribute to chronic diseases. Diet-related diseases and food insecurity worsen the inequalities in health and life chances among New Yorkers and impose a staggering economic burden on the city's workforce and health care system.

Creating a food system that can provide healthy, affordable food to all New Yorkers could improve population health, reduce suffering and inequality, save money, and promote economic development. Furthermore, better quality jobs, with living wages, safe working conditions, and benefits will also improve the health of employees, their families and their communities. By better aligning its economic, workforce development, food, and health policies, the government, businesses and people of New York City have the opportunity to set a new model for smart intersectoral development for the nation.

To provide policy makers and advocates with the evidence they need to make informed decisions, Jobs for a Healthier Diet and a Stronger Economy asks these questions:

- 1. What is the current employment pattern in the New York City's food system across all segments of the food chain from farm to table? What segments of the food workforce are expected to grow in the next five years?
- 2. What are existing models for creating new food jobs that support health by making healthy food available to more people? What are models for creating safe living wage food jobs? How do these two goals –good jobs and good food intersect and how do they conflict?
- 3. What are models for training new food workers? What are New York City's assets and limitations in training new food workers?
- 4. What are promising practices, policies and programs for the creation of new food jobs in New York City? What are models from other jurisdictions? What can the city learn from these efforts?
- 5. What are the options for financing new food job creation? What are the potentials and limitations of these options?
- 6. What actions can city government, employers, health institutions, and universities take to create new food jobs that support health and economic development?

The Economic and Political Context



Developing a feasible strategy to create Good Food Jobs in New York City requires recognition of the broader economic and political context in which such a process can emerge. First, any comprehensive response will require both public sector and private sector engagement. Public sector approaches include using taxation, public borrowing, subsidies, and social investment to encourage job creation. Private sector initiatives need to focus on long-term returns, a willingness to consider the benefits as well as the costs of regularizing employment (e.g., moving away from contingent employment with low salaries and no benefits) and improving working

conditions, and a capacity to reward entrepreneurial endeavors. For example, several New York City restaurants have joined with the Restaurant Opportunity Center, an organization that advocates for restaurant workers, to create "high road establishments" that seek to profit by paying their workers fair wages and offering customers healthier food.¹ Finding ways to engage a broad cross section of stakeholders in a dialogue on appropriate public and private roles is an essential prerequisite for a Good Food Jobs Strategy for New York City.

Second, the development of a Good Foods Jobs Strategy is linked to several other major policy discussions now playing out in New York City. These include creating a comprehensive municipal approach to workforce development; improving pay, benefits and working conditions for the city's lowest wage workers; developing policies and programs to reduce the burden of chronic diseases on New York City's population, health care system and economy;

credit: www.flickr.com/people/kymserrano/

developing more sustainable agriculture practices to reduce global warming; and finding ways to end hunger and food insecurity in New York City. Proponents of Good Foods Jobs will need to find the right balance between staying sharply focused on this specific goal and finding policy synergy with these related issues. In some cases, broader intersectoral and cross-issue coalitions will be better able to bring about policy change than a narrowly focused effort. For example, paid sick leave benefits all low-wage workers; thus, advocating such benefits separately for food workers might be a duplication of effort.

A third and related challenge is to discover the common ground that can unite the disparate proponents of a Good Food Jobs Strategy while acknowledging the differences among supporters. The labor, business, health and other groups that sponsor the Good Food Jobs projects we describe in this report bring different priorities to their work.

A recent conflict between the New York City's Economic Development Corporation (EDC) and Brandworkers, a Queens-based advocacy group that organizes workplace justice campaigns for food workers, illustrates these differences. The EDC, in partnership with Goldman Sachs, created the NYC Food Manufacturers Fund to provide financing to small food manufacturers. Brandworkers wanted EDC to guarantee more extensive public oversight of the loan process than EDC was willing to provide. While EDC did agree to disclose which companies are ultimately selected for loans under the program, Brandworkers demanded greater transparency throughout the process, including a requirement that recipients of loans sign a code of good conduct and requiring disclosure of businesses applying for loans. This latter mandate would presumably allow the public to raise concerns about employers that have been accused of labor violations before they are allowed to use the funds.² EDC countered that such requirements went beyond the mandate of the Fund.

Other efforts to create new food jobs have also been controversial. When FreshDirect, the company that delivers fresh food to middle class homes, asked for \$130 million in public subsidies to move from Queens to the South Bronx, a coalition of South Bronx groups unsuccessfully sued to stop the move on the ground that the company had failed to conduct an environmental impact assessment.³ Fast Food Forward, an organization seeking to improve working conditions for fast-food workers, has asked State Attorney General Eric Schneiderman to investigate the wage practices of fast-food restaurants and their parent companies for violations of state labor laws.⁴ Improving the quality of food and jobs inevitably challenges the status quo and thus creates conflict. In this report, we do not attempt to resolve these controversies. However, acknowledging these differences is a vital step towards resolving them or finding ways for the diverse partners needed to create new Good Food Jobs to collaborate on some issues in spite of principled disagreement on others.

To achieve full return on public and private investment in Good Food Jobs, policy makers may need to consider costs and benefits that transcend budget and political cycles. Enlisting constituencies that have the capacity and will to consider longer term perspectives –e.g., employers, labor unions, and universities –may help to move beyond the "quick fixes" that conform to the electoral timetable but sometimes lead to superficial solutions.

Finally, no single approach will by itself create all the Good Food Jobs that New York City needs. Different food sectors, communities and population groups will require different approaches to creating jobs on a scale that can make a difference. Good Food Jobs have been defined to include several requirements related to health, working conditions and the environment, as shown in the box below. Few jobs will meet all these expectations.

To meet the goal of creating 10,000 Good Food Jobs by the end of 2020, New York City will need to:

- 1. Create new jobs,
- 2. Upgrade existing food jobs into good jobs, and
- 3. Transform jobs that now prepare mostly unhealthy food into ones that produce and serve healthier fare.

The larger goal is to develop a comprehensive plan that will use these three approaches to increase the number of jobs in the food sector that better meet more of characteristics listed in Box 1, thus improving the entire continuum of jobs in this sector.

In the report, we profile six individuals who have created Good Food Jobs for themselves. These profiles show that

Box 1: Good Food Jobs

- Produce, distribute, prepare, sell or serve affordable food that promotes health and reduces hunger and food insecurity
- Pay workers a living wage and fair benefits
- Provide safe working conditions and adequate training
- Protect the environment and use sustainable practices

Adapted from:5,6

imaginative and entrepreneurial men and women can create meaningful, satisfying jobs that bring healthier food to many people. But the profiles also illustrate why individuals alone can't fix our food system. Each of those profiled encountered challenges that may have deterred a less determined person. And not every program profiled both produces healthy food and pays workers living wages, although we have selected examples that are moving in the right direction on these two fronts. Significantly, few of the stories we tell led to the creation of the hundreds or thousands of jobs that will be needed to realize the economic and health potential for Good Food Jobs. For

that, the more systemic changes -- public policies-- described in the recommendations will need to be implemented. Each profile ends with a few observations on what it would take to scale up this path to Good Food Jobs.



Profile 1: Osei Blackett, Creating Picky Eaters BBQ



By looking to tradition, Osei Blackett created something healthy, delicious and culturally relevant. A Trinidadian native, Blackett was dissatisfied with the Caribbean barbecue of Brooklyn. "We didn't grow up on jerk chicken," he comments, "That's more Jamaican." Hungry for the flavors of home, Blackett responded by opening Picky Eaters BBQ in 2009 after graduating with a hospitality degree from Kingsborough Community College that gave him the skills to start his own food business.

"I used to cook, making wings and stuff for friends of mine and it started from there," he states. Nestled in Prospect-Lefferts Gardens, Picky Eaters currently serves 60 to 80 guests on a Friday night. "As it gets warmer, it gets busier," Blackett comments. Employing one cashier and two cooks, this October will mark its fourth year anniversary.

"This is the kind of barbecue that the Trini are accustomed to," states Blackett. Operating without a fryer, Blackett grills fish and steams chicken, resulting in a juicy barbecue that is both healthful and bursting with flavor. "We do a lot of grilling," affirms Blackett. "We even barbecue lamb. Lamb we braise slow and then finish on the grill to order," he shares. All meats are finished with a homemade barbecue sauce that incorporates all natural juices.

Following Trinidadian cooking customs allows Picky Eaters to serve vegetarians as well. Vegetarians eating at a barbecue restaurant? "It's true; a lot of Rasta come and eat veggie lo mein, beans, [fresh juices], and fresh salad," says Blackett.

What public policies could have eased Blackett's new venture? "Give us a break," he suggests. "Provide grants or even tax breaks to those who are contributing to the health of this city". After all, this traditional barbecue with contemporary appeal attracts Brooklyn's health conscious and those hungry for the comforting flavors of home into the same line.

Scaling up: Picky Eaters is a small operation, but one of thousands of neighborhood take-out places. The Picky Eaters model shows that fast food can be flavorful, healthy, affordable, and culturally relevant to a community. Increased access to public affordable culinary and hospitality education, incentives for serving healthy food, and technical assistance in menu and recipe development and nutrition analysis can help this type of small business proliferate and expand.

Approaches to Creating Food Jobs

To answer the six questions listed on page 2, the report reviews seven approaches to creating new food jobs. Each targets a distinct segment of the food industry; many provide a mix of services, some aimed at employers and some at trainees or employees. These are briefly described in Box 2 below. Later in the report we describe examples of how each of these approaches is being applied in New York City today.

Box 2: Seven Approaches to New Good Food Jobs

1. Create or expand food production and distribution hubs.

One way to develop the food workforce is through the creation and expansion of food distribution hubs in the region. These hubs serve as transfer and distribution centers for produce and other foods supplied by farmers and manufacturers throughout the region and beyond. The USDA estimates there are 170 food hubs in the United States. Hubs are designed to bring together various actors from the supply chain, from processors to retailers, in order to strengthen the supply side of locally-produced food products. These centers catalyze the creation of jobs both onsite and in the transport of food to the hubs. They also help retailers keep costs down by creating one-stop shopping for store and restaurant owners or suppliers. Thoughtful investments in regional food distribution and production hubs such as these can be excellent mechanisms to create Good Food Jobs, stimulate economic growth, and scale up access to local, healthy and affordable food.

2. Provide subsidies, job training and other support for new and existing small groceries and supermarkets to enable expansion and healthier product choices.

Many communities have benefited from programs that provide subsidies, tax and other incentives, and zoning and/or rezoning strategies to encourage supermarket expansion and development. Several of these projects have demonstrated the health and economic benefits of supermarket growth and development. In general, these programs require that funded markets must be located in underserved areas (defined as below average income level and food market density within a census tract), accept SNAP benefits and WIC vouchers, and achieve additional positive social outcomes to be considered for financing. Some also require local hiring and job creation and payment of living wages. With the right strategies, efforts to support new and enhanced supermarkets improve the availability and affordability of fresh and healthy foods, while simultaneously creating good jobs and stimulating economic growth in the community.

3. Fund, train and improve opportunities for small entrepreneurs including street vendors and food truck operators who agree to sell healthy food.

These initiatives build on the entrepreneurial spirit of small business owners, often recent immigrants. By offering modest capital investment, microloans, subsidies, training and other services, municipalities can help these individuals launch or expand a business.¹² By providing incentives for these businesses to provide healthier food, this strategy can contribute to making healthy food more available and affordable in low-income communities often lacking such products.¹³ Mobile food vendors can also promote economic development, attract tourists and revitalize neighborhoods.

4. Create incubators that provide capital, training and infrastructure to support or expand catering services, retail food outlets and new or expanded food product offerings.

The incubator model has successfully supported business innovation and growth across multiple sectors, and food incubators can take various forms. For example, some incubators are commercial kitchens that are rented at affordable rates to make it feasible for food entrepreneurs to produce a commercially viable product with minimal financial hardship. Others provide retail opportunities at subsidized rents, sometimes in public markets. Some go beyond space provision and teach commercial-scale kitchen techniques as well as other skills needed to launch food businesses or manage food production. Some incubators target various specific populations including food entrepreneurs and aspiring food professionals, with a focus on pathways to ownership for low-income women, immigrant women, and minorities. By adding a healthy food focus, incubators can also help to increase the supply of nutritious, affordable food.

5. Support urban and regional agriculture projects that enable people to grow more healthy food in local sites and provide employment opportunities.

Urban and regional agriculture is a promising, appealing strategy to localize food production and create jobs. ^{16,17} Innovative models demonstrate that even in dense areas with limited open space, urban or periurban farming can supply a significant amount and variety of local produce to the City's residents, including specialty foods for immigrants as well as better off populations. ¹⁸ Such facilities often reclaim previously abandoned lots to grow food, which they then sell to local residents, increasing the amount of affordable, fresh, healthy food available in these communities, as well as creating jobs in both production and sales. Existing farmland within a few hours' drive of the city provides another source of fresh food and jobs and can contribute to more sustainable food production.

6. Assist institutional food programs to provide more training and to hire more skilled food workers in order to prepare healthier food in these settings.

Institutions such as schools, hospitals, senior centers, child care centers, and jails serve vulnerable populations many meals that can contribute to improved health. Recruitment and training programs can increase the cooking skills of these workers (e.g., by teaching them to use less sugar, salt and fat in the meals they prepare) and strengthen their capacity to prepare more meals with fresh healthy products. State or municipal institutional food and procurement guidelines can increase the healthfulness of institutional food and the market for local and regional food. ¹⁹ Improving the pay and working conditions of institutional food workers can lead to a more stable and skilled workforce better able to contribute to improved health and reduced health care costs for the millions of clients they serve. ²⁰ To realize this potential, institutional food programs may need help in overcoming the operational, regulatory and economic obstacles to preparing and serving healthier food.



7. Assist health providers and academic institutions to train and upgrade new and current home health aides, community health workers and other health care workers to provide nutrition counseling, skilled shopping, cooking education and assistance in food preparation.

By expanding the job descriptions and training programs for entry-level health care workers to include new skills in nutrition and food, they are equipped to assist clients with diet-related diseases to better manage their conditions and to prevent further deterioration.^{21,22} Improving pay and working conditions for these workers can yield a more stable, skilled and effective workforce, thus improving outcomes and reducing the costs of health care and long term care.

For each of these approaches, we examine selected current programs seeking to develop jobs, explore the evidence on the potential health benefits of expanding this sector, identify possible financing options for expanded job development and training, and describe barriers and possible strategies to overcome them. We'll also examine the opportunities and obstacles to creating safe, living wage jobs in this sector. In practice, some of the examples we describe combine two or more of these approaches into a single program.

Not every approach has the capacity to maximize the healthfulness of food and the pay, benefits and working conditions for food workers. Our goal is to provide policy makers and advocates with evidence that can be used to select a balanced portfolio of investments in new efforts to create Good Food Jobs.

Overview of Food Sector

To help readers understand the context in which changes in the food sector can occur, Box 3 provides a brief overview of the system that brings food from farms and factories to stores and tables. We then present data on patterns and changes in employment in retail food operations, restaurants and fast food outlets, food production and manufacturing and agriculture in New York City in the last decade.

Box 3: The Food System Supply Chain

Production entails the growing or raising of food in fields, orchards, ranches, farms, or fisheries. This includes fresh products such as fruits and vegetables, and raw materials for processed foods such as corn, wheat, and soy. Using the North American standard of industry classification, the major food producing sector is agriculture.

Processing is the preparation of raw foodstuffs into consumable products. This includes butchering, cleaning, and packaging of meats, fish, and poultry; washing and cutting vegetables; over milling grains; pressing oils; and preparing and packaging value-added goods such as canned, dried, pickled, frozen, or otherwise preserved foods. Food manufacturing is the major processing industry, which includes bakeries and butchers.

Distribution is the storage and delivery system by which food moves from farm or processing facility to consumer markets, typically via warehouse facilities that supply products wholesale. Food is transported by trucks, ships, trains, and airplanes and depends on effective and functioning infrastructure to work efficiently. Distributors aggregate products from a number of manufacturers and transport them to clients such as grocery stores, restaurants, schools or hospitals.

Retail is the outlet where food is marketed and sold for consumption. Food retail is typically divided into two main categories: grocery (supermarkets, bodegas, corner stores) and food service (restaurants and cafeterias). Standalone cafeterias are included in the official retail statistics; however, cafeterias in other industries, such as public schools and hospitals, would not be included in official counts. Occupational analysis is needed to capture the substantial number of food preparation and serving workers that are employed in other industries.

Waste includes food or food byproducts that are discarded or recycled. Food waste in this context includes edible foods that go uneaten due to surplus, perishability, or because they are unmarketable, as well as food scraps from household or restaurant preparation. Byproducts of food production, processing, and distribution are also considered food system waste. In this report, we do not consider this sector but it deserves future analysis for its potential for Good Food Jobs.

Each of these links in the supply chain has the potential for creation of Good Food Jobs.

Source: Green for all. Green Jobs in a Sustainable Food System. Oakland, CA, 2011.

The Food Sector in New York City

Tables 1 A, B and C provide an overview of selected segments of New York City's food sector and how they have changed in the last decade. Note that while the number of workers (1A) has increased by about 33% in the last decade and the number of establishments (1B) has increased by 27%, real average annual wages (1C) have decreased by 8%, with declines in all four sub-sectors. The table also shows that restaurants are by far the largest food sector employer in New York City, with more than twice as many employees as the three other sectors combined. Finally, the table also shows that segments of the food system have grown at significantly different rates over the last decade, with the restaurant and food retail segments growing more rapidly than the food manufacturing and grocery wholesale segments. Workforce developers will need to carefully assess where strategic opportunities for creating Good Food Jobs exist, understanding the potential role of market forces as well as the use of public subsidies, tax breaks and other incentives designed to encourage the creation of new Good Food Jobs.

1A. Changes in Er	mployment in New York (City's Food Sector, 2001-2011	;						
Sector 2001 2011 % Change									
Restaurants	156,107	225,453	44%						
Food Retail	55,043	65,741	19%						
Grocery Wholesale	18,386	20,215	10%						
Food Manufacturing	15,002	14,405	-4%						
Agriculture	185	245	32%						
TOTAL	244,723	326,059	33%						
SOURCE New York State Department of Labor Quar *Most recent year for which annual data are available 1B. Changes in Numbers	2.	Workers (NYSDOL QCEW) 2001-2011 Aver w York City's Food Sector, 200							
Sector	2001	2011	% Change						
Restaurants	12,934	18,374	42%						
Food Retail	6,810	7,856	15%						
Grocery Wholesale	1,688	1,723	2%						
Food Manufacturing	986	971	-2%						
Agriculture	38	51	34%						
TOTAL	24,457	30,986	27%						
SOURCE NYSDOL, QCEW 2001-2011									
1C. Changes in Avera	ge Real Wages* in New Y	ork City's Food Sector, 2001-2	011						
Sector	2001	2011	% Change						
Restaurants	\$25,665	\$24,438	-5%						
Food Retail	\$25,882	\$24,259	-6%						
Grocery Wholesale	\$53,935	\$50,502	-6%						

These tables reveal some troubling trends that planners of Good Food Jobs will need to address.

- The fastest growing segment, restaurants, is also the most associated in the nutrition literature with increases in consumption of high calorie, fat, sugar and salt diets.^{23,24} The fast food sector, a rapidly growing portion of the restaurant sector, contributes disproportionately to this trend. It's also a sector dominated by jobs with low wages and limited benefits. Restaurant workers are at unique risk of low wages because of current minimum wage laws. According to the US Department of Labor, New York State laws require a minimum cash wage of only \$5 per hour for food service workers, allowing a maximum tip credit of \$2.25 to be counted towards the current \$7.25 an hour state minimum wage, whether or not those tips are actually paid.²⁵ A new law approved by the State Legislature and the Governor in March 2013 will raise the state minimum wage to \$9.00 by 2016²⁶ but will not eliminate the tip credit that keeps the wages of food service workers lower than in other sectors.
- Agriculture and food manufacturing, the segments at the beginning of the food supply chain and with great
 potential to improve availability of healthy food in New York City, provide fewer jobs than other segments. Employment in food manufacturing, like manufacturing in general, is in decline. However, food manufacturing jobs
 pay substantially more than jobs in restaurants or retail, making it a promising segment for creation of entry level
 jobs. While agriculture employment grew over the decade, the net increase was small.
- The decline in wages in all four segments of the food chain over the last decade, a result of changes in the larger economy as well as in the food sector, illustrates the challenge of creating jobs with higher wages. It is modestly reassuring that the largest sector has had the smallest decline.

Career Ladders in the Food Sector

Currently, many jobs in the food sector offer low wages and inadequate benefits and working conditions. Any plan for creating new food jobs that also contribute to health should include proposals for upgrading the salaries, benefits, and working conditions for existing food jobs.

Job creators in the food sector face a dilemma. Part of the reason food jobs are attractive for recent immigrants and for bringing young people and unemployed workers back into the job market is that many food jobs are still available to those who have only a high school education or less. But in today's economy, this easy entry also means low wages. Table 2 below shows a selection of food sector jobs by level of education or experience required, with clear gains associated with additional education and experience.

Table 2: Pay Range and Levels of Education and Experience Required for Selected Food Jobs

High School and Little or No Experience	Experience and or Some Training	College and/or Very Experienced				
Jobs Preparing Food in Restaurants "Back of the House" Jobs						
Assistant Butcher Meat Specialist Where: Retail establishments Pay range: \$9-\$11 per hour	Line Cook Where: Restaurants and food services Pay range: \$10-\$12 per hour	Executive Pastry Chef Where: High end restaurants Pay range: \$65-\$100,000 per year				
Prep Cook Where: Restaurants Pay range:\$10-\$12 per hour	Sous chef Where: restaurants Pay range \$22,000 to \$44,000 per year	Executive Chef Where: High end restaurants Pay range: \$65-\$100,000 per year				
Assistant Baker or Pastry Cook Where: Restaurants Pay range: \$11 to \$12 per hour	Butcher Where: Retail establishments Pay range: \$33,000 to \$37,000	Banquet Chef Where: Corporate or institutional catering services Pay range: \$65-\$100,000 per year				
Jobs Serving	g Customers in Restaurants –"Front of t	the House" Jobs				
Waiter/waitress Where: Restaurants Pay range:\$5-\$9 per hour plus tips	Bartender Where: Restaurants, bars and clubs Pay range: \$5-\$9 per hour plus tips	Sommelier Where: High end restaurants Pay range: \$41-75,000 per year				
Reservationist/Hostess Where: Restaurants Pay range:\$20-\$32,000 per year or \$9-\$15 per hour	Shift manager Where: restaurants, fast food outlets, retail food stores Pay range: \$22-\$44,000 per year or \$12-\$22 per hour	General Manager/Owner Where: restaurants or catering facilities Pay range: \$85-\$185,000 per year				
Station Attendant Where: Restaurants and institutional food services Pay range:\$22-36,000 per year or \$10-\$17 per hour	Maitre D' Where: Restaurants and catering facilities Pay range: \$22,000-\$44,000 per year or \$12-\$22 per hour with tips possible					
Cashier Where: Restaurants, fast food outlets and grocery stores Pay range: \$8-\$12 per hour	Dining Room Manger Where: Commercial and institutional food services Pay range: \$41-75,000 per year					
Food Manufacturing Jobs						
Food batchmaker Where: Food manufacturing or preparation plants Pay range: \$17-\$27,000 per year or \$8-\$13 per hour	Quality Control Supervisor Where: Food manufacturing plants Pay range: \$36-\$74,000 per year					

High School and Little or No Experience	Experience and or Some Training	College and/or Very Experienced
Meatcutter/Fishcutter Where: retail food outlets or food manufacturing businesses Pay range:\$18-42,000 per year or \$9-\$20 per hour	Procurement/Supply Chain Manager Where: food manufactur- ers, warehouses or distributors Pay range: \$49-\$100,000 per year	
	Operations Director Where: Food manufacturing or distribution companies Pay range:\$45-\$100,000 per year	
Source: New York City Labor Market Information	Service at the CUNY Graduate Center	

Table 2 shows that there are several different levels of employment within the food sector, even though the majority of jobs and almost all entry level jobs are concentrated at the lower end of the pyramid. In the recommendations section, we suggest some ways that policy makers and workforce development planners can create career ladders that help workers move up.

Overview of Workforce Development

Workforce development connects individuals who want good jobs with employers who want good workers.²⁷ Any plan for Good Food Jobs will need to identify existing workforce development programs that can prepare workers for these positions and create new programs to fill gaps in the current system.

In 2011, New York City Workforce Investment Act funds provided a total of almost \$62 million for workforce development and more than 25 local, state and national foundations provided another almost \$52 million for a total of \$114 million. Unfortunately, since 2004, public funding for workforce development in New York City has decreased by 35% even though philanthropic contributions have increased by more than 180%, 28 leading to a small overall decline (of 0.5%) in workforce funding during the city's worst economic crisis since the Great Depression. The glass half-full story is that New York City public agencies and philanthropies continue to invest substantial resources in workforce development, making it a high priority to identify the best practices and most effective approaches so that these investments can help put more people to work.

Recent studies suggest that local "sectoral workforce development" in which job seekers are trained for a variety of positions in targeted and growing sectors may be particularly effective in placing trainees, raising the wages of low-income workers, and encouraging development in that sector.²⁹ To date, few organizations have applied this approach to the food sector.

A recent review of New York City's workforce development system, commissioned by the New York City Workforce Funders, a collaborative of foundations that support workforce development, found some successes and many problems. Its authors, a group of seasoned workforce program managers, concluded that "our current system, though significantly improved over the past several years, remains siloed in its sources of funding and fragmented in program delivery". Arguing that the city's approach to workforce development needed fundamental structural changes, the report recommended five design principles (listed in Box 4 below) upon which such a system should be built. These design priples should be taken into account in workforce development efforts across all sectors, including the food sector.

Box 4: Five Redesign Principles to Realign the New York City's Workforce Development System ³⁰						
А	renewed system should be redesigned to ensure that all workforce investments are:					
Integrative	The current system is siloed in its funding streams and fractured in its program implementation. The city requires a single political leader within the mayor's office and an integrated, strategic delivery system that can coordinate the full range of public and private resources.					
Transparent	Without a clear articulation of the goals of the city's workforce system— and in particular, the metrics by which it defines success—the system remains opaque, and therefore stakeholders cannot assess the relative costs and benefits of any proposed public workforce investment. The city requires an agreed-upon set of labor-market metrics for both businesses and jobseekers.					
Outcome- driven	The current system often requires conflicting processes and outcomes, many of which are short-term and unrelated to employer demand, and which place unrealistic demands on stakeholders. The city must instead reward long-term, high-quality labor market outcomes, providing practitioners the discretion—and the resources—to craft their strategies for differing businesses and jobseekers, while ensuring agility to adapt to an ever-changing labor market.					
Accessible	Not all jobseekers and businesses in the city are aware of the public workforce system, and many do not know how to access all available services. The city should ensure multiple, well-advertised and simple pathways to provide clear access for both businesses and jobseekers.					
Competent	The "front line" of the city's workforce structure—from jobseeker intake and referrals, to provider contracting and reimbursement— is the everyday functioning that makes or breaks the effectiveness of the workforce system. The city must invest in a proficient frontline infrastructure that rewards efficiency, innovation, alignment with labor market demand and ultimately, positive labor-market outcomes.					

Training for Food Jobs



Training food workers is an essential foundation for food workforce development yet if there is a word to summarize training for food sector jobs it is "inconsistent." Some workers are hired and trained on the job without any previous experience, while others pay tens of thousands of dollars to a proprietary culinary school to be trained. In some cases, workers in both categories are doing similar work for similar wages, sometimes even in the same kitchen. Making this anarchic and chaotic system more rational and more focused on public policy goals can help to achieve the Good Food Jobs goals proposed in this report.

There is no typical food worker. Individuals who fit common perceptions of food workers as poorly educated, low-skilled immigrants can be found but so can career changers with advanced degrees and the highly-educated underemployed. Another common misperception is that food jobs are primarily transitional jobs for high school students working part-time for spending money. While such opportunities exist, as the Restaurant Opportunities Center United Report, The Great Service Divide: Occupational Segregation and Inequality in the New York City Restaurant Industry³¹ shows, most food industry employees work for low wages over many years.

It is important to note that while a number of certification programs targeting food workers exist—bartending certification, culinary diplomas, and ServSafe, a training program operated by the National Restaurant Association -- no official licensure for chefs, bartenders, or other food workers exists. Necessary permitting to operate a food business is tied to the establishment and New York City DOMH requirements currently state that only one employee with their food handler certification must be on premises during all hours of operations.

Training programs range from the minimal to elaborate and highpriced private training. Illustrations and examples of each type are shown in Box 5.



Box 5: Approaches to Food Job Training

No formal training Workers report that they are often asked to recruit additional employees. While experience is considered desirable, it is not always required, especially for jobs in food manufacturing, quick serve restaurants, retail counter work, stewarding in a restaurant or institution, or helping with food preparation for catering. Training in these settings may include shadowing other employees, following instructions, or in one egregious case, working without pay for three days on a trial basis (an illegal practice). Example: "Depending on their (the new employee) experience, they are assigned a station and supervised by a fellow employee. If they seem capable, the supervision will be shortened, but they will continue to be monitored." –Sous Chef

Corporate training Many firms, especially large employers, have extensive in-house training programs, especially for supervisory positions and up. Employees "in the know" cite these programs as paid alternatives to higher education or proprietary training programs. "Our program was very specific. It went on for weeks and could absorb a terrible worker and turn them into something decent. The dining room was huge; 550 seats and the company standard has to span that entire room. When service begins, it is very difficult to keep track of everyone; the training prepares for that."—Server

Workforce development training Several programs serving unemployed or underemployed New Yorkers provide free government- or foundation-funded workplace readiness training, basic job training and placement. Examples of food worker training providers include the West Side Campaign against Hunger, Kingsborough Community College, Metropolitan Detention Center, Colors Hospitality Opportunities for Workers (CHOW), The Fortune Society, Hot Bread Kitchen, and Food 360. "There were a lot of different training sessions. The classes were long but I use the information now in my job for [a contract food provider]." -- Steward

Public schools A number of secondary and postsecondary programs train students for careers in food fields. At the secondary level, New York City Career and Technical Education (CTE) in partnership with the non-profit Careers through Culinary Arts Program (C-CAP) and others offer seven CTE programs in agricultural and domestic sciences, culinary arts and hospitality. In addition a number of secondary schools offer career training without CTE certification. A variety of CUNY campuses offer public higher education offerings for food jobs including culinary arts, foodservice management and hospitality management at Kingsborough Community College; foodservice management and dietetic technician training at LaGuardia Community College; hospitality management at New York City College of Technology and foods and nutrition at the CUNY School of Public Health, Brooklyn College, Queens College, and Lehman College.

Private schools Both accredited and unaccredited, for-profit and non-profit higher education institutions offer training for food jobs, largely, in culinary arts and baking and pastry arts. The Institute for Culinary Education, International Culinary Center, and Monroe College are proprietary schools focusing on culinary and hospitality education, while New York Institute of Technology, St. John's University, New York University, and Columbia University are not-for-profit universities with food-centered offerings across a variety of areas. A few schools emphasize other aspects of food and diet. For example, Just Food's Farm School trains farmers and the Institute for Integrative Nutrition offers training for "integrative health counselors."



Profile 2: Stefania Patinella, Training Child Care Workers to Cook from Scratch

"I believe we've gone in the wrong direction and we need to return to scratch. That is our best hope for getting good food on the table," says Stefania Patinella, Director of the Children's Aid Society's Food and Nutrition programs.

In her first weeks on board, Patinella eyed the cafeteria's uninspiring menu and commented, "If we just serve chicken nuggets, tater tots and bland vegetables, we are telling the children that this is healthy." For the new Program Director, the goal was to build cooking skills and promote conscious, even adventurous eaters. "This was not a way to expand palettes," she confirms.

To give program attendees a better idea of what balanced meals looks like, Patinella examined Children's Aid Go!Healthy programs, marrying the food service program with her newly created program for cooking education. The match replaced tater tots and chicken nuggets with Spanish-style fish, Haitian rice and sweet roasted butternut squash. Patinella even made sure that each daily menu includes the recipes, to inspire cooking at home.

Attendees found the meals delicious, but those in the dining room were not the only ones excited by the transformation. Program cooks had hoped to cook more authentic dishes for quite a time. "It's really not interesting and empowering to do a heat and serve job. It's kind of demoralizing," agrees Patinella. In response, Children's Aid trained 75 cooks across 38 agencies in two years and plans to train more in the future. "We are giving people back the idea to have empowerment in their lives," says Patinella.

Using each building as a multipurpose site, Cooking Education programs for all ages are held. Attendees learn about food, practice its preparation and also are fed as part of regular programming. Employing 20 cooks, the program feeds up to 2,000 kids a day and some, like those in the Early Childhood Program, are fed more than once "The children's program is a narrow slice, but it is an important slice," reminds Patinella.

"Food service has not grown, because our sites have not," says Patinella, but combining programs allowed many more children to get freshly cooked food. Because many homemade items cost less than store-bought counterparts, the program found that the cost increases and savings balanced. The federal Child and Adult Care Food Programs, contributes about 75% of the budget and the remaining 25% comes from private gifts.

"I believe despite all the direction we've made in this country, the USDA standards are still not sufficient. While they provide measurements of sodium or fat, there are good and bad fats to take into account, and sodium is in almost all prepared foods," says Patinella. With an education program that focuses on cooking from scratch, Patinella gives children, parents and cooks the tools to build better meals, increasing their chances for health, happiness and success.

Scaling up: The Children's Aid Society has made improving its food service a priority and developed an innovative training program. To help the hundreds of other childcare providers in New York City benefit from this approach, public and private funders could provide organizations with grants for equipment, culinary training programs for workers, and technical assistance on recipes, nutrition, and procurement.

Good Food Jobs Provide Three Paths To Health

Creating new and better food jobs can support health in at least three distinct ways. First, making healthier food more available and affordable can help to reduce the growing health and economic burden that diet-related diseases such as diabetes, heart disease and some forms of cancer impose on New York City. Second, increasing access to healthier affordable foods, especially in low-income communities, can reduce hunger and food insecurity, conditions that influence physical and mental health and still afflict more than a million New York City children, adults and senior citizens. City Harvest estimates that almost 1.3 million city residents are food insecure.³² Third, improving working conditions for the city's almost 300,000 food workers can reduce work-related accidents and injuries, improve food safety and enable these workers to keep their families healthy. Table 3 summarizes how new Good Food Jobs could contribute to reducing food-related health problems and lowering their cost to society.

Table 3: New good foods jobs reduce food related health problems and their economic costs

The Problem	The Health and Economic Costs	Possible Good Food Job Solutions
Increasing diet-related diseases such as diabetes, hypertension, heart disease, stroke, and some forms of cancer. Arthritis, asthma and depression are also worsened by an unhealthy diet.	Obesity causes 5,800 premature deaths in NYC each year; 58% of all NYC adults are overweight or obese and in some poor neighborhoods the rate reaches 70%; One in three adult New Yorkers has diabetes or a condition known as pre-diabetes. In 2007, there were 2,600 hospitalizations for diabetes related amputations in NYC; 1,400 people who required dialysis due to diabetes and more than 100,000 adults have diabetic retinopathy (eye disease) which if untreated, can lead to blindness. In NYC, Medicaid spends more than \$3 billion a year to treat diet-related illnesses. ³³	 New food carts, street vendors and small grocery stores can make fruits and vegetables and other healthier foods more available in low-income neighborhoods. Cooks in schools, child care centers and hospitals can learn to prepare food with less fat, salt and sugar. Food job incubators can train small entrepreneurs to prepare and sell healthier food in retail and institutional settings. Food stores and restaurants as well as hospitals and health centers can hire food coaches to help people at risk of diet-related disease to make healthier choices. Schools, universities, businesses and health centers can hire food educators and nutritionists to assist people to make healthier food choices.

High rates of hunger and food insecurity worsen other physical and mental health problems. The 1.3 million food insecure NYC residents face many problems: poorly nourished children have lower school test scores and require more costly health care; hunger reduces the productivity of workers, which reduces their earnings, which, in turn, reduces their ability to purchase nutritious food for their children; for children and adults, insufficient nutrition worsens other health problems like chronic diseases and psychological problems.³⁴

- City can expand efforts to attract supermarkets with low cost healthy food to open in low-income neigh borhoods, creating more jobs.
- 2. City can make free lunch universal in city schools, creating need for additional staff.
- City can train cooks in programs that serve hungry o homeless people to prepare healthier food.
- 4. City can offer subsidies to encourage more food markets and vendors to accept SNAP and offer discounts on healthy food, thus expanding business.
- 5. Ensuring that all food sectors workers are paid living wages will reduce food insecurity in their families.
- 6. City or private investors can create new models of food service delivery (e.g., by van, walking or bicycling) to bring healthy food, including prepared healthy food, to time-strapped households in neighborhoods with limited access to healthy food or to increase pick up locations for CSA Programs that accept SNAP benefits.

Unsafe working conditions and low wages for food workers harm the health of food workers and their families

Some food employers pay less than minimum wage, do not provide benefits such as health insurance or paid sick leave, or offer inadequate worker safety training. As a result, workers have high rates of accidents and injuries, can't adequately support their families, and may prepare food improperly, contributing to food-related illnesses.³⁵

- City can vigorously enforce wage and working conditions laws in food outlets.
- 2. State can increases minimum wage and city and state can implement paid sick leave to allow sick food workers to stay home.
- Organizations such as ROC and Fast Food Forward can inform workers of their rights and help them to get appropriate safeguards.



Profile 3: Johanna Kolodny, Foraging To Link Taste and Health

Concern for health and responsible eating choices, along with a love of fine dining, have given Johanna Kolodny a mission. While many restaurant kitchens consider ordering food to be part of the chef's responsibilities, or one of a part-time purchaser, Kolodny saw procuring high quality ingredients as a more-than-full-time task, one that would reap full benefits. In the challenging calculus of "green jobs," Kolodny created for herself a new good food job.



Forging connections between NYC chefs and farmers in the surrounding tri-state area, Kolodny was first recruited as a forager by Basis Farm to Table, a wholesaler, and then by Print restaurant in the Ink48 Hotel. Through her efforts and recognition, more food outlets wanted her services and her title changed from "Food Forager" for one restaurant to "Foraging Consultant" for many. Currently, Kolodny introduces chefs to many new products, most from New York City and the surrounding region.

"It's not easy. I need to make sure that the farmers are compensated correctly, but that the chefs are still happy with their product," admits Kolodny. Whenever a person of expertise is incorporated, there is a cost. "I bring a better product than [chefs] could find on their own, presenting

better quality, and diverse ingredients," she states. "I do believe in it. It is tastier, better for you, better for labor and animals."

Better too, for the regional economy.

But is everyone willing to pay this difference? "There are those who care and those who won't. To bring me onboard means you are willing to pay more because we understand what it takes to have holistic food practices."

Scaling up: Those outside the world of fine dining may be unfamiliar with the job title "forager". As our attention shifts to the sustainability, quality, and security of the global food supply, finding "the best" for food establishments across the spectrum will increase in importance. The best need not be the most luxurious or expensive—sustainably produced, good value, providing fair terms to the grower and processor, and packaged and distributed with minimum environmental impact are all of import to the success of food enterprises and, increasingly, to consumers. Imagine foragers working for school or university food programs or associations of non-chain fast food outlets or bodegas.

Good Food Jobs Model Programs

New York City

In the past decade, a variety of new projects have been initiated to create new food jobs, many also having health and nutritional goals. In this section, we describe such efforts in New York City and also in other jurisdictions. For this report, we examined eleven programs in New York City that we selected to illustrate the diversity, accomplishments, limitations and potential for replication of various approaches to creating Good Food Jobs. Many more such programs exist, creating a rich starting point for learning about what works—and what does not—to create more Good Food Jobs. For example, there are more than 20 kitchen incubators In New York City, with the capacity to get many small food businesses started.³⁶ Table 4 briefly describes the 11 programs we selected and Table 5 provides our assessment of the extent to which their objectives include creation of new jobs, improvements of wages and working conditions for food workers, or efforts to improve health by reducing food insecurity or increasing access to healthy, affordable food. The methodology we used to make these determinations is explained below.

Table 4: Selected NYC Food Sector Job Creation and Training Programs

Program Name (Type)	Description
Added Value Red Hook Community Farm and The Farm at Governor's Island Urban and regional agricul- ture project	In addition to being a working farm where produce is grown, Red Hook Community Farm also serves as host to the Red Hook Farmer's Market as well as a CSA program that serves more than 70 families each week, a Community Composting Initiative, Youth Empowerment programs, local restaurant supply partnerships, and Farm-Based Learning programs for New York City schools. They also manage a three-acre farm on Governors Island in partnership with the Governors Island Preservation and Education Corporation. ³⁷
BK Flea/Smorgasburg Food hub based in public market	These public markets feature more than 100 local vendors from New York City and across the region selling packaged and prepared foods. The Flea also operates the food and beverage concession at the Central Park SummerStage outdoor concert series. ³⁸
East NY Farms Urban and regional agriculture project	East New York Farms is a project of the United Community Centers that is committed to organizing youth and adults to address food justice in their own community by promoting local sustainable agriculture and community-led economic development. The Farm has four components: a farmers market, urban agriculture, youth internships, and community supported agriculture. ³⁹
Gotham Greens Urban and regional agriculture project	In 2013, New York State committed \$902,000 for Gotham Greens to construct a rooftop greenhouse facility on an existing manufacturing building in Jamaica, Queens that will yield more than 500 tons of fresh produce each year. They will also partner on the Oakpoint Property (see below) in the South Bronx, developing a rooftop greenhouse on top of a new food distribution center. ⁴⁰
HOPE Program's GROCERY Works Increased training of skilled food workers	This food retail workforce development program trains people for careers in the food retail industry that offer opportunities for advancement. Employed graduates receive job retention, skills building and career advancement support. In the past year, 67 people have graduated from the program, with 80% securing employment in the field. ⁴¹
Hunts Point Expansion of food distribution hub	The effort to redevelop the Hunts Point Market is expected to cost \$332.5 million and will increase storage capacity by 20%, improve rail infrastructure and internal traffic circulation, ensure compliance with current food safety standards and regulations, and increase environmental sustainability of the facility. ⁴²
Kingsborough Community College Culinary Arts Program Increased training of skilled food workers	The Culinary Arts Program at Kingsborough Community College is a comprehensive training program designed for successful entry into the creative, high-paced workplaces of the food industry. The program offers different degrees and certificates, based on individual needs and career aspirations: an Associate of Applied Science (A.A.S.) Degree in Culinary arts, and certificate programs in Culinary Arts and Food & Beverage. ⁴³

La Marqueta/Hot Bread Kitchen Incubator Incubator to support catering service	This non-profit social enterprise supports start-up food entrepreneur's in launching scalable food businesses, with a specific focus on creating pathways to business ownership for low-income women and minorities. ⁴⁴
NYC Green Cart Initiative Funding and training for small entrepreneurs	The Green Cart Initiative is a public/private partnership with The Mayor's Fund to Advance New York City and the DOHMH, seeded by a \$1.5 million grant from the Tisch Illumination Fund. Green Cart vendors are independent businesses selling fresh, unprocessed fruits and vegetables in New York City neighborhoods with the most limited access to fresh and healthy foods. ⁴⁵
The Oakpoint Property Creation of food production and distribution hubs	New York State Regional Economic Development Council has committed \$400,000 in new funding for the Oak Point Property to construct a warehouse, distribution and food processing facility. The project will feature locally grown organic produce and farm products from New York State growers, a rooftop farm run by Gotham Greens, and a training facility. 46
The Entrepreneur's Space Incubator to support new food outlets	The Entrepreneur Space is a City-sponsored business incubator in Queens to help food-related and general business start-ups across New York City. The mission is to help emerging entrepreneurs build their business by providing affordable space and counseling. ⁴⁷

To assess the potential of these eleven food job programs to contribute to job creation and improved working condi-

tions, information was gathered primarily from the programs' or sponsoring organizations' websites, as well as from news articles, press releases or other organizational documents. In cases where it was not possible to identify an average wage (e.g., new businesses emerging from incubators), it is assumed that the incubators have an indirect impact on increased earning potential. Our findings are shown in Table 5.

To determine these programs' contributions to reducing food insecurity and increasing access to affordable

In the past decade, a variety of new projects have been initiated to create new food jobs, many also having health and nutritional goals.

healthy food, nearby food environments were assessed to determine whether or not these programs are providing food in places where there was a lack of food availability prior to the program, and/or a lack of nearby healthy and affordable food options. Primary resources for gathering this information were two New York City reports on the geographic distribution of grocery stores. 48,49

Table 5: Overview and Assessment of Selected New York City Food Job Programs

X= direct impact; y=indirect impact

Program	New job creation	# New jobs created	Living wages and safe conditions	Reduce food insecurity	Increase access to affordable healthy food	Funding Streams/ Financing Structures
Added Value Red Hook Community Farm and The Farm at Governor's Island	X	~20 teens/year since 2003 ⁵⁰	X	X	X	Public -private partnership; Non-profit with various funding sources; NYC Dept. Parks and Recreation and Cornell partners for design and development of farm
BK Flea/ Smorgasburg	X	Currently 44 food vendors ⁵¹	У	у	У	Private business; vendors pay rental fees for each day they sell at any of the markets
East NY Farms	У	5 admin staff; # urban farmers unknown ⁵²	У	X	X	A project of East NY's United Com- munity Centers, a local non- profit
Gotham Greens	X	25 full-time; additional 50 during greenhouse construction ⁵³	X	Х	X	Privately held company
HOPE Program's GRO-CERY Works	у	67 graduates, 80% secured employment ⁵⁴	у	у	у	Developed and administered by Hope Program, a nonprofit focused on employment and advancement for New Yorkers. Funded by the New York City Council.

Hunts Point	X	~2,000 direct jobs retained; ~3,600 indirect jobs retained ⁵⁵		X	X	Public-Private Partnership: Almost 50/50 between the cooperative of 46 produce wholesal- ers who operate the market and the public sector through federal, state and city resources
Kingsbor- ough Communi- ty College Culinary Arts Program	у	~200 students enrolled in de- gree programs; program has trained ~1,000 jobseekers; ~60% placement rate	у	У	у	Public-Private Partnership: part of CUNY, supported by the City and NYC residents' tax dollars, and other public and private funds
La Marqueta/ Hot Bread Kitchen Incu- bator	X	13 staff mem- bers; currently in- cubating 14 food companies ⁵⁶		X	X	Public-Private Partnership: NYC City Council and EDC funded the revitalization, and the anchor tenant HBK developed the incubator.
NYC Green Cart Initiative	X	~900 new jobs (524 carts) ⁵⁷		X	X	Public-Private Partnership: The Mayor's Fund to Advance NYC, NYC DOH, and the Laurie M. Tisch Illumination Fund
The Oakpoint Property	X	100 jobs during site cleanup; expected 450 new jobs when food campus is complete ⁵⁸			X	Public-Private Partnership: Private Developer and NY State Regional Economic Devel- opment funds
The Entrepre- neur's Space	X	170 entrepreneur clients ⁵⁹	У			Public: Funding from NYC through NYC EDC granted to the Queens EDC

Our review of the characteristics of these 11 programs shows that eight led directly to the creation of new jobs and three indirectly; two offered living wages directly and six contributed indirectly; six made direct contributions and three indirect to reducing food insecurity; and seven contributed directly and three indirectly to making more available the foods that can contribute to reducing diet-related diseases. Overall, seven of the eleven demonstrated some accomplishments in all four areas (job creation, living wages, food insecurity, diet-related diseases); two in three areas and two in two areas.

These findings suggest that New York City government, businesses and non-profit groups have demonstrated that it is possible to create innovative food jobs programs that demonstrate multiple accomplishments. They also indicate, however, that to date most of these accomplishments have been modest and small scale, reinforcing the message that if New York City hopes to realize the full range of benefits that Good Food Jobs could bring, larger scale and more systemic approaches will be needed.

Job Creation Programs in Other Jurisdictions



In this section, we examine innovative approaches to creating new food jobs in other cities, states and nations. Our review includes public and private programs as well as public/private partnerships. Some efforts are locally focused while others are statewide, illustrating the wide array of options and potential partnerships and structures that can support the creation and expansion of Good Food Jobs. This brief summary shows that New York City efforts to create new Good Food Jobs have a wealth of experience to build on.

City: Toronto and Province: Ontario, Canada

Toronto, Canada has long been an international leader in using food to achieve intersectoral policy goals. The Toronto Food Policy Council (TFPC) was formed in 1991, and has since been advocating for equitable access to food, community development, and environmental health. Through its close work with the Toronto Department of Public Health, including its Food Strategy team, the TFPC has mobilized support for city-wide efforts that involve job creation and training. Toronto's food activism has also spread to the provincial level. This year, Kathleen Wynne, the Ontario Province's new Minister of Food, Agriculture, and Rural Affairs, plans to reintroduce the Local Food Act, which seeks to create jobs and promote economic development by encouraging more consumption of locally grown food.

Toronto's FoodShare, a nonprofit group that has sparked many of the city's innovative programs, operates several job development programs, including a culinary program that uses its teaching kitchen to educate adults in culinary skills and a partnership with the Centre for Addiction and Mental Health (CAMH) that provides its clients with six months of paid employment in addition to job training and coaching. ⁶²

Food Forward, another multi-faceted Toronto organization, has developed a Food Entrepreneur Training Program to give food retailers business-specific training and insight from Toronto's leading food entrepreneurs and has a Good

Food Jobs board and resource directory.⁶³ Several incubators including the Toronto Food Business Incubator, a non-profit organization that provides industrial culinary equipment and business resources to new entrepreneurs at low costs, have helped to launch numerous micro-businesses.⁶⁴

The Stop Community Food Centre, once a conventional Toronto food bank, has grown into a social justice-oriented community food hub that aims to increase access to healthy food in a manner that maintains dignity and challenges inequality. Expanding their programs and activities has allowed the non-profit organization to hire individuals from the surrounding community.

The Canadian Region of the United Food and Commercial Workers' (UFCW) offers a variety of job training programs through its regional training centers. ⁶⁶ Union members can enroll in academic upgrading computer courses, English as a Second Language, labor education, pre-apprenticeship, and courses specific to food retail. The local centers build relationships with universities to create curriculum around food retail. Not far outside of Toronto, the newly established Conestoga College Institute of Food Processing Technology prepares skilled workers in Ontario's expanding food and beverage processing industry. ⁶⁷

Several organizations in Toronto provide training and workshops for new farmers. Everdale, the Collaborative Regional Alliance for Farmer Training (CRAFT), and FarmStart all provide a variety of hands-on and class-room-based training opportunities for a diversity of individuals interested in farming. Several new farmers intend to stay in the city, where they can develop innovative applications of their food-growing skills. Like New York City, Toronto is located within a productive agricultural region and building alliances between urban food groups and farmers and farm organizations has the potential to increase consumption of local fresh food and create new jobs in food production and distribution.

State: California

The California Fresh Works Fund is a public-private partnership that operates a \$264 million loan fund created to increase access to healthy foods in underserved communities, spur economic development and create jobs, and inspire innovation in healthy food retailing.⁶⁹ The fund provides flexible capital, sometimes with companion grants to eligible grocery stores and other forms of healthy food retail and distribution.⁷⁰ It is modeled after the Pennsylvania Fresh Food Financing Initiative and was developed to align with the national Healthy Food Financing Initiative. Cities and towns all over California will benefit from this fund.

Cities: Los Angeles, Oakland and San Francisco

In addition to this powerful statewide effort, major cities in California are also working at the local level to create Good Food Jobs. Los Angeles and San Francisco both house kitchen incubators (The Chef's Kitchen in LA and La Cocina in SF), similar in design to NYC examples. Oakland has a long history of food production, and the city is currently experiencing a multi-dimensional food renaissance.⁷¹ Oakland is home to food production, distribution and supply. As an investment in this industry, city administrators developed the Oakland Waterfront Food Trail in 2008 to introduce participants to artisan and specialty food enterprises and to educate policymakers, lenders, civic leaders, regulators, press and consumers about the importance of this industry in Oakland.⁷²

Oakland also has a Food Policy Council committed to producing 30% of the city's food needs within the city and to ensure all residents access to healthy food—creating more jobs and healthier communities.⁷³

Profile: The Bread Project (San Francisco)⁷⁴ is a California nonprofit public benefit corporation that trains people with low incomes who face barriers to employment in the skills needed to start careers in commercial baking and cooking positions. Training programs provide 9-12 weeks of training in various aspects of food production. In the last two years, graduates have earned nearly \$2 million and the Project has provided job training to more than 300 individuals.⁷⁵

City: Chicago

Growing Home is an innovative transitional employment program for homeless individuals that also increases access to fresh food for Chicago residents. Started in 1992, the program builds life and job skills through organic agriculture. The program pays participants for a seven-month internship at the program's three USDA Certified-Organic sites, including a 10-acre farm outside the city, an urban organic greenhouse, and a small urban vegetable garden and apiary beekeeping site. The organic agriculture business funds the employment program through sales at its farmer's market stand and CSA program. In addition to organic agriculture, participants learn farm stand marketing and sales, nutrition education, job readiness, life skills, personal money management and GED preparation. After the seven-month internship, Growing Home works to help participants secure full time employment. Since 2001, 100 people have participated in the program, 65% of them have stable jobs, 90% have stable housing, and the farms made \$108,000 in sales in 2009.

State: Pennsylvania

Created in 2004, the Pennsylvania Fresh Food Financing Initiative (FFFI) is an \$85 million (leveraged from an initial \$30 million in state seed money) public-private partnership grant and loan program to encourage supermarket development in underserved neighborhoods throughout the state.⁷⁹ The statewide program is the first of its kind, becoming a model for communities nationwide to develop innovative financing mechanisms that support change at the city and neighborhood level. Three partners manage the initiative: The Reinvestment Fund, The Food Trust and the Greater Philadelphia Urban Affairs Coalition. Almost 10 years later, the FFFI has provided funding for 88 fresh-food retail projects in 34 Pennsylvania counties, creating or preserving more than 5,000 jobs and improving more than half a million people's access to healthy food. Additionally, a single store in Philadelphia increased the local tax revenue by \$540,000.⁸⁰

City: Philadelphia

Profile: The Dorrance H. Hamilton Center for Culinary Enterprises (CCE)⁸¹ supports both established and start-up food businesses and food processors in need of commercial kitchen space and technical assistance. It partners with the School District of Philadelphia and Philadelphia Academies. The program offers a combination of business education and advanced culinary instruction to high school seniors from Philadelphia public schools with existing culinary and hospitality programs and with another non-profit that teaches industry and culinary skills to young adults transitioning out of foster care.

City: Portland, Oregon

Food processing is a growing field in the state of Oregon and has been yielding new jobs in recent years. A recent guide describes many of these programs, located throughout the state but especially concentrated in the city of Portland. ⁸² Portland State University offers a Food Industry Leadership Program and Center, while Portland Community College offers a quicker-start option with a "Getting Your Recipe to Market" course. This course takes food entrepreneurs from concept to commercial ready, teaching food safety and science, recipe formulation, product development, brand development and marketing, basic financial management, product distribution and more. It also gives students the opportunity to compete for \$2,000 in launch funding and dedicated retail shelf space with a local retailer. Oregon State University in Portland is also home to a Food Innovation Center that focuses on product and process development, packaging and engineering, shelf life studies, and consumer sensory testing, providing these services to existing food companies. John's Catering and Food Cart Kitchen is a Portland rental kitchen incubator similar to models in other cities and particularly relevant for Portland's thriving street food scene. Lastly, DePaul Packaging in Portland is a facility that packages bulk product in retail proportions, as well as club store variety packs, helping food entrepreneurs get their product distributed more efficiently.

City: Boston

Profile: City Fresh Food, located in the Roxbury neighborhood in Boston, employs 65 local residents and delivers 11,000 nutritious, hot meals every day to schools, child care and senior citizens centers throughout Boston. With annual sales of \$5 million a year and a fleet of 15 trucks, City Fresh is operated by community residents who also constitute a majority of owners. It also offers profit-sharing options to long term workers and provides educational and financial opportunities to its employees. Its suppliers include local farmers and the company grows its own salad greens.⁸³

Profile 4: James Johnson Piett, An Evangelist for Community Development



James Johnson-Piett is the principal and CEO of Urbane Development, a business that has been bringing nutritious foods to impoverished areas of Philadelphia since 2009. He has become an "evangelist for a new kind of community development that emphasizes community anchor businesses and institutions as agents of change – solving local problems and elevating the quality of life for underserved communities." Urbane Development was founded to "build dynamic neighborhoods and positively impact underserved communities." Johnson-Piett was raised in North Philadelphia's Strawberry Mansion where he experienced impoverished communities firsthand. But instead of seeing these areas as extinct markets, he sees them as underserved, rich with the opportunity for growth. "There is an existing business class that with a little bit of assistance can do an excel-

lent job of serving their communities," claims Johnson-Piett. Armed with financial backing, market information, and advice, Johnson-Piett encourages existing bodega owners to offer a fuller, healthier inventory in order to garner more consumer spending. "When you run metrics you not only look at how much money people spend on produce, but also how much on aspirational and therapeutic expenses," says Johnson-Piett. Seeing the potential for more profit, Johnson-Piett encourages bodegas to carry fresh fruit and vegetables. "I advise owners, 'You need to add produce

because you can get ten extra bucks per person.' Grocery is a tough business and a grocer is not going to make twenty or thirty percent net profit. However, if we change the program a little we will find a better growth margin and more profit. In the end, what you're selling is really a great experience on a small scale."

Scaling up: Much of Johnson-Piett's work is typical real estate development, but his focus on food retailing as a catalyst to neighborhood improvement is his distinct contribution. Community boards and the public sector can find new ways to make healthy food more available while also promoting small businesses that go beyond simply courting supermarkets.

Funders and Financing Streams

Successful initiatives to create new food jobs in New York City require funders to provide startup capital and financing streams to support and maintain these programs. Some of the organizations that have provided funding for food jobs programs include:

- US Department of Labor Workforce Development
- New York City EDC and Industrial Development Agency
- New York State Empire Development Corporation and New York State Department of Agriculture and Markets;
- Public-private partnerships such as the Food Manufacturers Fund, the Low Income Investment Fund and Healthy Food, Healthy Communities
- Private and venture capital groups such as the Goldman Sachs Urban Investment Group
- Private philanthropies such as the Tisch Illumination Fund

In addition, local and state officials may be able to use federal funding streams such as the programs created by the Affordable Care Act, Medicaid and Medicare, SNAP and WIC programs to pay for the health care and food assistance that create new opportunities to create Good Food Jobs. For example, if a Medicare-funded home health aide developed new skills to purchase and prepare food that helped clients with diabetes avoid hospitalizations and complications, some of the Medicare dollars saved by this approach could be reinvested in providing more home health aides with the training and increased pay these new skills warranted.

These and other organizations can provide Good Food Jobs programs both direct and indirect support by awarding grants or contracts, making loans, offering tax breaks or subsidies, offering space or equipment or providing various types of technical assistance. Table 6 provides an overview of several organizations that have provided funding to New York City Good Food Jobs Programs.

Table 6: Funding and Financing Streams for Good Food Jobs in New York City

FRESH

Public funding, subsidies and tax breaks for expanding, improving or opening new groceries and supermarkets

In response to a study conducted by the New York City Departments of Health and City Planning and the New York City EDC for the Mayor's Food Policy Task Force, the City established the Food Retail Expansion to Support Health (FRESH) program. FRESH promotes the creation and retention of local grocery stores in underserved communities through city and state zoning, tax and financial incentives to store operators and developers, in addition to linking them to other forms of support through the city and the state.⁸⁵ It is estimated to have created 450 jobs since it started.⁸⁶

GOLDMAN SACHS NYC FOOD MANUFACTURERS FUND

Public/private loan fund to expand food businesses

In partnership with the New York City EDC, the Fund makes affordable financing available to enable eligible businesses in the City's small food manufacturing sector to invest and expand their business operations and create new employment opportunities in the City.⁸⁷ The fund is part of Goldman Sachs national 10,000 Small Businesses Initiative.

HEALTHY FOOD FINANCING INITIATIVE(HFFI)

Federal grant and loan to community development groups and small businesses for healthy food projects

HFFI is a partnership between the USDA and the Departments of the Treasury and Health and Human Services that provides grants and loans to community development financial institutions, nonprofits, and small businesses to expand healthy food access in underserved communities. Awards are intended to mitigate financial barriers to projects in low-income neighborhoods including supermarket and grocery store development, increasing the distribution of agricultural products, and strengthening producer-to-consumer relationships. The HFFI was created in 2009, modeled on Pennsylvania's Fresh Food Financing Initiative, which has provided funding for 93 projects, created or preserved more than 5,000 jobs, and eliminated numerous food deserts across the state. In fiscal year 2012, Congress authorized \$32 million for the HFFI through Treasury (\$22 million) and HHS (\$10 million). Additionally, there are programs at the USDA that integrate healthy food access, including Rural Development, the Farmers Market Promotion Program, Community Food Projects, and programs within the Food and Nutrition Service. 88

In 2013, the Community Economic Development Healthy Food Financing Initiative Projects will award up to \$10 million in CED discretionary grant funds to community development corporations for community-based efforts to improve the economic and physical health of people in areas designated as food deserts. The program seeks to fund projects that will implement innovative strategies for revitalizing communities and eliminating food deserts as well as achieving sustainable employment and business opportunities for and/or in low-income communities.⁸⁹

HEALTHY FOOD HEALTHY COMMUNITIES FUND

Subsidies and other support for groceries and supermarkets This New York State fund is designed to meet the financing needs of food markets in underserved communities, which often cannot obtain conventional financing for infrastructure costs and credit needs. The \$30 million fund is part of a statewide initiative to promote healthy communities. The Low Income Investment Fund, The Reinvestment Fund, The Food Trust and the New York State Health Foundation are partnering on this effort. The Fund estimates it has created or preserved 3.075 jobs and supported 382 construction jobs.

COMMUNITY FOOD FUNDERS

Philanthropic network

CFF is a philanthropic organizing project formed in 2011 to provide information, resources and networking opportunities for funders in the New York, New Jersey and southern Connecticut region to invest in the transition to an equitable, ecologically sound and sustainable regional food system that emphasizes local growing, processing and distribution.8 Its members include the North Star Fund, David Rockefeller Fund, Doris Duke Charitable Foundation, Jessie Smith Noyes Foundation, Laurie M. Tisch Illumination Fund, Merck Family Fund, New World Foundation Surdna Foundation and others.

Profile 5: Tania Lopez, Preparing Healthy Food for Healthy Children



While some are busy bemoaning the declining health of New Yorkers, others, like entrepreneur Tania Lopez, forge new career paths and spread the word about health and nutrition in the process. Mother of two, Lopez paid attention to reports that the health of American children was declining. With particular concern for her son, Lopez decided to take action.

Reaching to her Puerto Rican roots for inspiration, she found healthy, delicious and efficient recipes and incorpo-

rated them into her household. "I didn't think it was hard, I just thought, 'I want to do this because it makes me feel happy' and I'm passionate about food," she comments. It worked. As her family's diet changed, Lopez watched her son grow from a cuddly little boy into a healthy and athletic young man. Inspired by her son's transformation, an impassioned Lopez began a social enterprise organization determined to reduce obesity and diabetes in children through expanding the changes she made at home to the community.

Lopez started a blog and opened a Twitter account, documenting cooking demonstrations that she started in neighborhood bodegas. To capture children's attention, Lopez incorporated the coqui as her mascot, wearing the costume of an adorable, singing Puerto Rican frog while cooking. With Coqui the Chef, Lopez entertained and educated young listeners about the importance of nutrition and well-balanced meals.

Coqui the Chef was a hit. Coqui's classes outgrew bodegas to become a full-fledged social venture. She set up shop in the Police Athletic League and NYC public schools and expanded her blog into a full-fledged website. Lopez's cooking demonstrations even expanded beyond pediatric health, including senior citizens and families.

Hungry to keep growing, Lopez searched for government funding, but found the grants world to be complex. "They don't pay right away and grants are not easy to get," she said. Instead, she partnered with non-profit organizations like the South Bronx Overall Economic Development Corporation. "Money is an important factor, don't stick to one way of getting money. Try multiple ways, one will eventually fall into place," advises Lopez. With an American Heart Association Impact Grant and another from the Citizens Committee for New York City, Lopez stepped out of the suit herself and hired a chef and additional staff to play Coqui at birthday parties, schools, and community events around the city.

"They don't pay right away and grants are not easy to get...Money is an important factor, don't stick to one way of getting money. Try multiple ways, one will eventually fall into place."

Booking through its website, Coqui now offers workshops primarily for children aged 5-12. A three-day course, offering one one-hour class per day, teaches children how to make drinks like tropical sunset smoothies and tamarind juice and healthy snacks like guacamole, stir-fried butternut squash with kale, mojo marinade and salsa tropical appetizer.

Kids also learn how to read nutrition labels and ingredients and are encouraged to ask for nutritious foods when shopping. On the third day of the course, the class is given a "Little Chefs' Kit" and a special guest is invited to attend. In the last class, young capoeira students came to demonstrate a healthy and fun way to exercise. Children left dancing the ginga in chef hats. "The parents were in love with it," exclaims Lopez.

Scaling up: Nutrition and food education need not be the exclusive domain of professional nutritionists. Non-profits and social enterprises can get kids moving, talking about, and handling healthy food. Public and private funding and a resurgence of home economics education with a healthy focus will support these efforts. Creating jobs educating children and adults about food can provide individuals with good communications skills and a desire to teach and learn about nutrition with both a mission and a career.

Recommendations

10,000 new Good Food Jobs by the end of 2020

The NYC Food Policy Center proposes that New York City government and businesses create 10,000 new Good Food Jobs in the region by the end of 2020. As previously noted, some of these will be brand new jobs, others upgraded existing food jobs and still others will result from transforming jobs that now prepare mostly unhealthy food. This target was



as a meaningful but realistic goal for ensuring that a significant portion of the expected job growth in the food sector creates good food jobs and to encourage policies that help to achieve that goal. In Box 6 below, we propose six distinct strategies, each designed to create at least 1,000 new Good Food Jobs by 2020-- a total of 6,000 jobs that illustrate the intersectoral, innovative thinking that will be needed to reach the target of 10,000 jobs. Our hope is to inspire New Yorkers from all walks of life to propose other innovative ways to generate Good Food Jobs.

Green Pirate, a Brooklyn-based food company, sells fruit and vegetables juices from its trucks.

Box 6: Six Strategies for 1,000 New Good Food Jobs

1. Enroll more children in New York City School Food programs to generate more jobs to prepare healthier food

Today 650,000 of New York City's 1.2 million school children get lunch in school. Increasing enrollment in the school food program by 15% would bring an additional 97,500 children into the program. According to an existing agreement between SchoolFood, the operator of New York City's school feeding program, and Local 372 of District Council 37, the labor union that represents school food workers, preparing, serving and cleaning up for each additional 100 lunches yields 5.5 additional labors. Thus 97,500 new enrollees would create 883 six-hour a day school food jobs—union jobs with benefits. Among the job titles of those working in school food are cooks, lunch helpers, loaders and handlers. Increasing participation in the city's school breakfast programs by 35,000 children would generate an additional 117 new jobs to reach the goal of 1,000. Since school food is almost entirely paid for with federal dollars and student fees, the revenues to support these new jobs would not need to come from New York City or State budgets.

By providing more flexibility in menu planning and funding for additional training to existing and new school food workers to help them develop skills to further reduce salt, fat and sugar in school foods and by providing frontline school food workers with the time to engage parents and children in creating more appealing menus and food choices, SchoolFood could continue to make progress in improving the nutritional quality and appeal of the food served in New York City schools.

2. Create the New York City Healthy Food Truck and Street Vendors Project

About 4,000 food carts and trucks sell food on city streets, providing nourishment to thousands of New Yorkers in every neighborhood and jobs for many recent immigrants and budding entrepreneurs. But according to David Weber, president of the New York City Food Truck Association, the vast majority of these vendors sell ice cream, soda and over-boiled hot dogs, not the healthy food that many New Yorkers crave. In addition, food vendors face a gauntlet of city regulations that make it difficult to operate a business and frequently lead to fines and tickets that wipe out any profit. In addition, established food outlets often oppose policies that would enable these vendors to expand their business.

To remedy this situation, New York City should create a Healthy Food Truck and Street Vendors Project to assist vendors to negotiate the bureaucracy and prepare healthier affordable foods. Using the model for Green Carts, a City Council and Mayors' Office Initiative that brought carts selling fruits and vegetables in low-income neighborhoods, the project could expedite vendor licenses for operators who agreed to sell healthy food and meet minimum wage standards for employees. Borrowing from the Healthy Catering Initiative sponsored by London's municipal government, 55 the Project could train vendors to prepare tasty food with less salt, fat and sugar. Such training could also help existing street vendors to improve the nutritional quality of their food. For example, a New York City Healthy Dog Competition could encourage food cart operators to propose recipes for tasty hot dogs that used turkey instead of beef, local cabbage for sauerkraut, and whole-wheat buns. A test kitchen could assist operators to offer healthier options in order to increase sales. Working closely with the city's health department and other agencies, the Project could find new ways to protect food safety, improve nutritional quality and expand the demand for healthy food.

New York City's robust tourism industry could provide another market for healthy food truck and street vendors. Visitors to New York City could go to Times Square, Central Park, Prospect Park, sports arenas or elsewhere to find healthy street food from around the world. The goal of the Healthy Food Truck and Street Vendors Project would be to license, train and support 1,000 new vendors by the end of 2020.

3. Build new food processing plants that can process regionally grown food for institutions and small retail outlets.

In 2010, FoodWorks, a plan to improve New York City's food system developed by New York City Council Speaker Christine Quinn, proposed that the city create processing centers that could provide value-added products and fresh regional convenience foods to New York City institutions, retailers and consumers.⁹⁶ For example, a facility that could wash and package lettuce and other greens could make it easier for schools, child care centers and retail outlets to provide fresh, convenient locally grown produce. In Burlington, Vermont, to give another example, a local bean grower created a facility to produce black bean crumble, a product that is now regularly purchased by the Burlington school system and other local school systems to serve in their schools, improving the health of their children and the local economy. Currently, about 14,500 workers manufacture or process food in New York City and this sector has been shrinking. Because more food manufacturing jobs could make substantial contributions to providing healthier food for New Yorkers and good jobs for city residents, we propose to increase the number of jobs in this sector by 7% --1,000 new jobs—by 2020. A prime market for the lightly processed regional food that new processing centers could produce are the city's schools, hospitals, child care centers, senior centers and jails. Each year these and other city institutions serve 270 million meals to the city's most vulnerable populations, a market that has the potential to create thousands of new jobs if re-conceptualized as an engine for economic development as well as health improvement. Already, the New York City Food Standards, the city's new procurement guidelines, mandate that these institutions meet nutritional standards.⁹⁷ By offering additional incentives for serving more regionally grown food, the city could encourage food distributors to purchase more local food and stimulate demand for the lightly processed food that institutions often require. For example, getting pre-cleaned lettuce and greens saves institutions storage and labor costs. Of note, this strategy could also increase the number of farm and agricultural jobs in the region, a goal that could serve to strengthen partnerships with New York State government efforts to create Good Food Jobs.

To achieve the goal of creating 1,000 new food processing jobs, city government and workforce development programs will need to move aggressively. Actions steps include:

- Create an inventory of available manufacturing and incubator space and technical assistance to help processors find and move into useable space and obtain the technical assistance and support needed to achieve sustainability and economies of scale:
- Conduct research with the city's largest institutional food programs to identify and quantify potential demand for regionally grown or manufactured products that could be added to their menus (e.g., lettuce, apples, milk, bread, beef, eggs, sweet corn and cabbage, all products grown or manufactured in the state). To illustrate, New York City's institutional food providers could determine that a locally produced low sugar, low salt tomato sauce could meet city school, hospital and jail needs for healthy, bulk tomato sauce. A consortium of institutional food providers could find regional growers who could scale up production with a guaranteed market and identify the capital and entrepreneurs needed to create the local processing plant for this new product. With time, a New York City branded Big Tomato Healthy Tomato Sauce could be sold to other schools, universities and hospitals in the region, creating even more farm and processing jobs.
- Job training programs to prepare workers for new facilities and provide job retention and upgrading support in early years;
- Develop an online and face-to-face resource center to assist small grocery stores and bodegas or their distributors to buy directly from local food processors and to assist processors to deliver food to retail outlets, CSAs and other sites.

4. Create social enterprise organizations that can win contracts for institutional food by providing affordable healthy food

Institutional food can provide other opportunities for creating Good Food Jobs. Currently, many institutions (e.g., universities and hospitals) in New York City purchase the food they serve their clients or users from national food service companies with headquarters and employees outside the city. For example, New York University, with 40,000 students, contracts for food services with Aramark, a global corporation based in Philadelphia, and New York City public hospitals contract with Sodexho, a multinational company with its headquarters in Paris, to deliver prepared meals to its facilities every night. These big food service companies have centralized supply chains, making it difficult to avoid processed food; pay their workers low wages and offer few benefits.98 Few have made health a priority in the menus they offer. By considering the 270 million meals that New York City serves in public institutions each year (budgeted at an estimated cost of at least \$500 million per year in 2012)99 not only as a cost to be minimized but as an opportunity for economic development, health promotion and job creation, it would be possible to create thousands of new Good Food Jobs in New York City over the next decade.

New York's many nonprofit institutions that serve institutional food in New York constitute an even larger market. The city's universities and voluntary hospitals alone serve tens of millions of meals a year. This potential new market for healthy, locally sourced institutional food could also help the new food processing plants described above to grow and prosper, an example of the synergy between various good food job proposals.

To explore and develop this opportunity, New York City could:

- Develop pilot programs in which city agencies contract with non-profits, social enterprise organizations or community-based businesses (e.g., companies modeled on City Fresh Foods in Boston, described previously) to test models for healthy institutional food services.
- Analyze alternative models for institutional food services in other jurisdictions to identity relevant practices for New York City.
- Create an institutional food service incubator that assists local companies to develop and test various approaches to producing and distributing healthy food to the city's many public and private institutions.

5. Upgrade home health aides to become healthy food shoppers and cooks for people with diabetes and other diet-related diseases

One in three adult New Yorkers now either has diabetes or a condition known as pre-diabetes. An estimated 650,000 city residents have diabetes and the number of people with diabetes has increased by 150% over the past 20 years. Diabetes is a leading contributor to premature deaths and preventable hospitalizations in the city. Many more city residents have other diet-related diseases such as heart disease, hypertension and some forms of cancer. The good news is that even for people who already have diabetes, making modifications in their diet can prevent complications and slow the course of the disease, thus preventing suffering and saving health care costs.¹⁰⁰

Home attendants and home health aides provide care for people with illnesses. In New York City, about 154,000 people are employed in these two home care categories. For the decade between 2010 and 2020, the US Bureau of Labor Statistics projects a 69% rise nationwide in the number of home health aide positions, and a 37% increase in the number of home health aide positions in New York during the same time period. Each year about 4,700 new jobs are created for home health aides in New York City.¹⁰¹

How can these jobs, which pay about \$20,000 a year, become Good Food Jobs? Imagine if every person with diabetes eligible for home care had an aide who could help them shop to find the low salt, low fat, low sugar products that help to maintain blood sugar at safe levels and other foods that contribute to the weight loss that reduces diabetes complications? Imagine if every diabetes patient also had access to the services of care taker with the knowledge and skills to prepare tasty affordable meals that met dietary requirements of people with diabetes?

Research studies have shown that the changes in diet and physical activity can be effective in slowing disease progression¹⁰² and more effective than medications in preventing people with pre-diabetes from becoming diabetic.¹⁰³ Health-care costs for a person with diabetes are more than five times higher than for those without it — \$13,000 versus \$2,500. Thus, preventing diabetes complications or disease progression can bring big savings for patients and tax payers.

To realize this opportunity, it is proposed to expand the training for home care providers (who now must complete 6-12 hours of training annually) in order to prepare 1,000 home care providers with new skills. Those completing the training would receive additional compensation and home care agencies could win additional reimbursement for home care staff with these skills. An evaluation of a demonstration project could provide the evidence needed to determine whether to expand this approach.

6. Enroll 250,000 eligible New Yorkers in SNAP (Food Stamps) to increase demand for healthy food in small groceries, bodegas, farmers markets and CSA

Although 1.8 million New Yorkers get SNAP benefits, another 500,000 eligible residents are not enrolled. By enrolling half of these eligible people in the next four years, New York City could create a large new market for healthier food. By assisting retail food outlets, farmers markets, CSA's in New York City and regional farms outside the city to make healthy food more available and affordable, the city could create the demand that would seed new jobs in these sectors.

In 2012, SNAP provided \$5.6 billion that were spent in grocery stores, bodegas and farmers markets in New York State, all of it in federal dollars.¹⁰⁴ A 2002 study found that every \$5 of SNAP spending generates \$9 in economic activity,¹⁰⁵ suggesting that increased enrollment in SNAP will benefit the economies of the city's poorest neighborhoods. A variety of evidence shows that SNAP participation reduces food insecurity, increases intake of calcium, folates and iron^{106,107} and in some case may protect recipients against obesity.¹⁰⁸ A growing number of health researchers are calling for changes in SNAP to increase its impact on the nutritional quality available to recipients.¹⁰⁹

In New York City in 2010, the average SNAP recipient received \$287 in benefits per month or \$3,444 per year.¹¹⁰ A 2011 study estimated that New York City lost almost \$125 million in food revenues a year by not enrolling into SNAP all eligible participants.¹¹¹ Enrolling another 250,000 people would bring millions of dollars of additional SNAP benefits into New York City, generating new economic activity in the city's poorest communities. What steps can New York City take to use an expansion of the number of people receiving SNAP benefits to design a campaign that could better protect the health of all SNAP recipients and also increase the number of Good Food Jobs?

- •Assist all Farmers Markets and Community-Supported Agriculture Projects in New York City to acquire electronic benefit transfer equipment that enables SNAP recipients to obtain fruits and vegetables at these sites. Such a move would help to increase demand for locally produced fruits, vegetable and other products;
- Enlist the Advertising Council and other public relations groups and City Harvest, the Food Bank and other nonprofit food organizations to assist trade associations of groceries and bodegas to develop healthy food marketing campaigns designed to attract SNAP recipients to purchase healthier food at their local retail outlets.
- Expand the Healthy Bodega program and its successor Shop Healthy New York City that assists small groceries stores to acquire refrigeration and other equipment that allows them to sell fresh produce.
- Expand the Health Bucks program that provides cash incentives for SNAP recipients to use their benefits to buy healthy food and encourage New York State government to contribute funding to Health Bucks in order to support the state's farmers. Provide loans, tax breaks or subsidies to retail outlets and food distributors that hire new workers who are paid living wages to meet expanded demand from SNAP recipients.

Recent Congressional proposals to dramatically cut SNAP benefits will make it more difficult to develop innovative ways to use SNAP to promote health but will do nothing to reduce the need for such innovation.

Recommendations for Creating an Infrastructure to Sustain Good Food Jobs

To ensure continuing progress towards the creation and sustainability of Good Food Jobs, the organizations involved in developing these new positions will also need to build the infrastructure that can provide ongoing support to this effort. To achieve this goal, the New York City Food Policy Center suggests:

To ensure continuing progress towards the creation and sustainability of Good Food Jobs, the organizations involved in developing these new positions will also need to build the infrastructure that can provide ongoing support to this effort. To achieve this goal, the New York City Food Policy Center suggests:

- 1. The Mayor should appoint a Good Food Jobs Task Force to coordinate public, labor, commercial and non-profit efforts to create and maintain Good Food Jobs. Good Food Jobs require intersectoral action and a task force can help to make certain that the right players are at the table. This task force could have a life span of two or three years, by which time its responsibilities could be assumed by the entities described below.
- 2. The City Council should provide funding for a Good Food Jobs Coordinator to serve as the city's point person for Good Food Jobs. This new staff person could be based in the Mayor's Office of Food Policy and serve as staff to the Good Food Jobs Task Force and the coordinator and monitor of all city activities related to Good Food Jobs.
- 3. City government, employers, labor unions, workforce development programs and educational institu- tions should create a New York City Food Workforce Development Sector Center to provide ongoing coordinated and comprehensive support to organizations and individuals that are training and employing food workers or creating food businesses. Sector-wide job development is an effective and efficient strategy for aligning the activities of many organizations with new opportunities for creating jobs, spurring economic development, and, in this case, promoting health. Among the activities the Center could take on are:
 - A comprehensive assessment of market and public policy trends that will influence the NYC food system over the next 10 years, with a focus on identifying trends that could provide opportunities for creating Good Food Jobs.
 - An inventory and assessment of the multiple workforce development efforts currently in place in the region
 with the goal of identifying ways to strengthen or consolidate programs across sectors to promote Good
 Food Jobs.
 - An analysis of the potential for better using the multiple existing funding streams and financing op-tions for Good Food Jobs in order to provide expanded and stable funding for new initiatives that can enable successful programs to scale up.

To ensure that the goals of reducing food insecurity and diet-related diseases remain at the center of New York City's food sector workforce development, it is recommended that:

• The New York City DOHMH should create a new certificate and training program in healthy food preparation to complement its existing food safety certificate. Food outlets should receive incentives to send staff for such training and technical assistance and support to help them prepare and market healthier food.

Such upgrading also becomes a step up on a career ladder and ultimately a rationale for increasing the pay of a more highly skilled workforce that contributes to reducing the cost of diet-related diseases in New York. In the past, DOHMH training of food workers has focused exclusively on food safety, still an important concern. But as diet-related chronic diseas- es become the main health burden imposed by our current food system, it makes sense for the department to expand its food handlers training programs to better meet today's challenges from diet-related diseases.112

• CUNY and other appropriate partners should develop and begin to implement a comprehensive plan to create the food, nutrition and health care workforce needed to better integrate health and nutrition into the city's food sector. The foundation for this plan should be the existing workforce development and professional educational preparation programs in food, nutrition and health care. A consortium of local universities should create a Food Innovation Center similar to the one at Oregon State University to assist large and small New York City food producers in product and process development, packaging and engineering, shelf life studies, and consumer sensory testing in order to create healthier, more affordable yet still profitable products for the New York metropolitan region market.

These recommendations provide a starting point for making New York City a center of innovation for Good Food Jobs. New York has long been both ground zero for the nation's most serious health and social problems and an incubator for imaginative and effective solutions to these problems. By committing to a Good Food Jobs strategy, the next Mayor of New York City can contribute to this tradition while helping to solve some of the city's and nation's most persistent problems.

References

- 1. Restaurant Opportunity Center of New York. What is a high road restaurant? Available at: http://www.rocny.org/node/123.
- Chen M. New York Wants to Boost Food Manufacturing, but Will Communities get a Raw Deal? In These Times. March 4, 2013. Available at: http://inthesetimes.com/working/entry/14674/new_york_nycedc_food_manufacturing_loan_fund/
- Murphy J. Fresh Direct's Bronx Foes Weigh Appeal. June 4, 2013.
 City Limits Bronx Bureau. http://www.bronxbureau.org/2013/06/04/freshdirects-bronx-foes-weigh-appeal/
- 4. Gogolak EC. City Council Hears Plea from Fast-Food workers. New York Ties, June 28, 2013. p. A22.
- Liu YY, Good Food Good Jobs for All. Oakland, CA: Applied Research Center, July 2012.
- Food Chain Workers Alliance. The Hands that Feed Us: Challenges and Opportunities for Workers Along the Food Chain. June, 2012.
- Horst M, Ringstrom E, Tyman S, Ward MK, Werner V, Born B. Toward a More Expansive Understanding of Food Hubs. Journal of Agriculture, Food Systems and Community Development 2011; 21(17). 209–225.
- USDA. USDA Identifies Infrastructure and Economic Opportunities for Regional Producers. Release No. 0170.11. April 19,2011.
- Day-Farnsworth L, McCown B, Miller M, Pfeiffer A. Scaling Up: Meeting the Demand for Local Food. UW-Extension Ag Innovation Center. UW-Madison Center for Integrated Agricultural Systems, December, 2009.
- Goldstein I, Loethen L, Kako E, Califano C. CDFI Financing of Supermarkets in Underserved Communities: A Case Study. Philadelpha, PA: The Reinvestment Fund August 1, 2008 Available at: http://www.trfund.com/resource/downloads/policypubs/Supermarkets_Full_Study.pdf
- Fife JA, Bringing Supermarkets into Food Deserts: An Analysis of Retail Intervention Policies (Spring 2012). Available at SSRN: http:// dx.doi.org/10.2139/ssrn.2197864
- Frommer R, Norman E, Gall B, Knepper L. Streets of Dreams How Cities Can Create Economic Opportunity By Knocking Down Protectionist Barriers To Street Vending. Arlington, VA: Institute For Justice, July 2011.
- Mintzer R. Food Trucks 101: How to Start a Mobile Food Business. Entrepreneur Press, July 25, 2011. Available at: http://www.entre-preneur.com/article/220060#ixzz2V4RPcZ4h
- Ungerleider N. Taking a tip from tech, food incubators launch startups. Reuters, Dec 13 2012. Available at: http://www.reuters.com/ article/2012/12/13/us-food-startups-idUSBRE8BC14920121213
- Culinary Incubator. A website developed for helping entrepreneurs find a place to produce their food product http://www.culinaryincubator.com/index2.php
- Hagey A, Rice S, Flournoy R. Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities. Oakland, CA, Policy Link, 2012.
- 17. Fernandez M, Goodal KI, Olson M, Méndez VE. Agroecology and Alternative Agri-Food Movements in the United States: Toward a Sustainable Agri-Food System. Agroecology and Sustainable Food Systems. 2013;37:1.
- 18. Urban Agriculture Committee of the Community Food Security Coalition. Urban Agriculture and Community Food Security in the United States: Farming from the City Center To the Urban Fringe. Community Food Security Coalition, 2003. Available at: http://foodsecurity.org/PrimerCFSCUAC.pdf
- 19. Kimmons J, Jones S, McPeak HH, Bowden B. Developing and

- Implementing Health and Sustainability Guidelines for Institutional Food Service. Adv Nutr2012; 3: 337-342.
- Borgmann J. Emerging Solutions to the Failure of Institutional Food.
 Clearinghouse Review: Journal of Poverty Law and Policy2012, 294: 46.
- 21. Babamoto KS, Sey KA, Camilleri AJ, Karlan VJ, Catalasan J, Morisky DE. Improving diabetes care and health measures among hispanics using community health workers: results from a randomized controlled trial. Health Educ Behav. 2009;36(1):113-26.
- Freudenberg N, Tsui E. Training new community health, food service, and environmental protection workers could boost health, jobs, and growth. Health Aff (Millwood). 2011;30(11):2098-106.
- Powell LM, Nguyen BT. Fast-food and full-service restaurant consumption among children and adolescents: effect on energy, beverage, and nutrient intake. JAMA Pediatr. 2013;167(1):14-20.
- 24. Larson N, Neumark-Sztainer D, Laska MN, Story M. Young adults and eating away from home: associations with dietary intake patterns and weight status differ by choice of restaurant. J Am Diet Assoc. 2011;111(11):1696-703.
- Minimum Wages for Tipped Employees. January 1, 2013. United States Department of Labor. Available at: http://www.dol.gov/whd/ state/tipped.htm
- 26. Kaplan T. State Leaders Reach Deal to Raise Minimum Wage. New York Times, March 19, 2013, p. A20.
- New York City Workforce Strategy Group. Re-Envisioning the New York City Workforce System. New York: 2013.
- New York City Workforce Strategy Group. Re-Envisioning the New York City Workforce System. New York: 2013.
- Maguire S, Freely J, Clymer C, Conway M, Schwartz D. Tuning into Local Labor Markets: Findings from the Sectoral Employment Impact Study. Philadelphia, PA: Public/Private Ventures, 2010.
- New York City Workforce Strategy Group. Re-Envisioning the New York City Workforce System. New York: 2013.
- 31. The Restaurant Opportunities Center of New York and The New York Restaurant Industry Coalition. The Great Service Divide: Occupational Segregation and Inequality in the New York Restaurant Industry. New York, 2009.
- 32. City Harvest. Hunger in NYC: Food Insecurity. 2013. Available at: http://www.cityharvest.org/hunger-in-nyc/food-insecurity
- 33. New York City Obesity Task Force. Reversing the Epidemic: The New York City Obesity Task Force Plan to Prevent and Control Obesity. New York City Department of Health and Mental Hygiene. 2012.
- 34. Cook JT, Black M, Chilton M, Cutts d, Ettinger de Cuba S, Heeren TC, Rose-Jacobs R, et al. Are food insecurity's health impacts underestimated in the U.S. population?. Advanced Nutrition. 2012; 4(1): 51-61.
- 35. Restaurant Opportunities Center of New York and The New York City Restaurant Industry Coalition, Behind the Kitchen Door: Pervasive Inequality in New York City 's Thriving Restaurant Industry. New York, 2005.
- 36. Culinary Incubator New York Database. Culinary Incubator http://www.culinaryincubator.com/maps.php?state=NY
- Added Value. Red Hook Farm: About Us. 2013. http://added-value. org/growing-a-just-food-system
- Brooklyn Flea/Smorgasburg. About Us. 2013. http://www.brooklyn-flea.com/about/
- East New York Farms. About Us. 2013. http://www.eastnewyorkfarms.org/index.php?option=com_content&view=article&id=18<emid=6

- Puri V. Gotham Greens Farms, LLC Sustainable Urban CEA Final Report. Gotham Greens. 2011
- The Hope Program. Grocery Works. 2013. http://www.thehopeprogram.org/direct-services.
- 42. NY Regional Economic Development Council. Hunts Point Produce Market Redevelopment. 2012. http://regionalcouncils.ny.gov/.
- Kingsborough Community College. Culinary Arts Program. 2013. http://www.kbcc.cuny.edu/academicdepartments/tah/pages/culinaryarts.aspx.
- 44. Hot Bread Kitchen. La Marqueta. 2013. www.hotbreadkitchen.org.
- 45. Karp Resources. Projects: NYC Green Carts Initiative. 2013. http://www.karpresources.com/projects.
- 46. Bronx Borough President. Oakpoint Property Press Release. 2012. http://bronxboropres.nyc.gov/press/releases/2012-12-19.html.
- Entrepreneur Space. New York City Economic Development Corporation, 2013. http://www.nycedc.com/program/entrepreneur-space
- 48. NYC Department of Health and Mental Hygiene. NYC Full Service Grocery Store Analysis. New York: 2010.
- 49. NYC Department of City . Going to Market: New York City's Neighborhood Grocery Store and Supermarket Shortage. New York, 2008.
- Added Value. Red Hook Farm: About Us. 2013. http://added-value. org/growing-a-just-food-system.
- Brooklyn Flea/Smorgasburg. About Us. 2013. http://www.brooklynflea.com/about/.
- East New York Farms. About Us. 2013. http://www.eastnewyorkfarms.org/index.php?option=com_content&view=article&id=18<emid=6
- Puri V. Gotham Greens Farms, LLC Sustainable Urban CEA Final Report. Gotham Greens. 2011.
- The Hope Program. Grocery Works. 2013. http://www.thehopeprogram.org/direct-services
- NY Regional Economic Development Council. Hunts Point Produce Market Redevelopment. Council, 2012. http://regionalcouncils. ny.gov/. 2012
- 56. Hot Bread Kitchen. La Marqueta. 2013. www.hotbreadkitchen.org.
- 57. Karp Resources. Projects: NYC Green Carts Initiative. 2013. http://www.karpresources.com/projects.
- 58. Bronx Borough President. Oakpoint Property Press Release. 2012. http://bronxboropres.nyc.gov/press/releases/2012-12-19.html.
- New York City Economic Development Corporation. The Entrepreneur Space. Corporation, 2013. http://www.nycedc.com/program/entrepreneur-space. 2013.
- 60. Fox C. The Link-Tank: Toronto Food Policy Council, in Food Policy Councils Innovations in Democratic Governance for A Sustainable and Equitable Food System. Los Angeles: UCLA Urban Planning Department, 2010, pp. 16-26.
- 61. Bill 36, Local Food Act, 2013. http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&Intranet=&BillID=2754
- 62. Food Share. Annual Report 2012. http://www.foodshare.net/files/www/AboutUs/2012-FoodShare-AnnualReport-Final.pdf
- 63. Food Forward. About Food Forward. http://pushfoodforward.com/about
- 64. Toronto Food Business Incubator. Business Incubation. http://www.tfbi.ca/01aboutus.htm
- 65. Levkoe CZ, Wakefield S. The Community Food Centre: Creating space for a just, sustainable healthy food system. Journal of Agriculture, Food Systems, and Community Development 2011; 2(1)249-268.
- 66. UFCW Canada. Classroom Training. http://www.ufcw.ca/index.php?option=com_content&view=arti-

- cle&id=1994&Itemid=297&lang=en
- 67. Q & A with Susan McLachlan, Institute of Food Processing Technology Communications Officer. Global Food Safety Resource. http://www.globalfoodsafetyresource.com/article/new-content/240-food-safety-education/809-the-institute-of-food-processing-technology.html
- 68. FarmOn. Supporting Success: Coaching, Mentorship and Advising for New Farmers in Ontario. Bashaw, Canada, 2012.
- 69. NCB Capital Impact. Healthy Food Financing: California Freshworks Fund. 2013. http://www.ncbcapitalimpact.org/default.aspx-?id=1989.
- NCB Capital Impact. Healthy Food Financing: California Freshworks Fund. 2013. http://www.ncbcapitalimpact.org/default. aspx?id=1989.
- City of Oakland Administration, California. Economic and Workforce Development. 2013. http://www2.oaklandnet.com/Government/o/CityAdministration/d/EconomicDevelopment/index.htm.
- 72. City of Oakland Administration, California. Economic and Workforce Development. 2013. http://www2.oaklandnet.com/Government/o/CityAdministration/d/EconomicDevelopment/index.htm.
- City of Oakland Administration, California. Economic and Workforce Development. 2013. http://www2.oaklandnet.com/Government/o/CityAdministration/d/EconomicDevelopment/index.htm.
- The Bread Project, 2013. About. 2013. http://www.breadproject. org
- 75. The Bread Project. About. 2013. http://www.breadproject.org.
- 76. Growing Home. About. 2013. http://growinghomeinc.org/.
- 77. Growing Home. About. 2013. http://growinghomeinc.org/.
- 78. Growing Home. About. 2013. http://growinghomeinc.org/.
- 79. The Food Trust. What We Do: With Supermarkets. 2013. http://www.thefoodtrust.org.
- 80. The Food Trust. What We Do: With Supermarkets. 2013. http://www.thefoodtrust.org.
- 81. The Enterprise Center. The Dorrance H. Hamilton Center for Culinary Enterprises. 2013. http://theenterprisecenter.com/initiatives/cc/.
- 82. Seufert J. Oregon Resources for Food Entrepreneurs. Dayton Community Development Association, Downtown Dayton Oregon. 2013. http://www.daytonoregon.org/about-the-dcda/.
- 83. Kennedy PL. Green Growing. BU Today. December 20,2012. Available at: http://www.bu.edu/today/2012/green-growing/
- 84. James Johnson-Piett. Urbane Development. http://urbane-dev.com/about/the-team/james-johnson-piett-2/
- 85. New York City Economic Development Corporation. Food Retail Expansion to Support Health (FRESH), 2013. Available at: http://www.nycedc.com/program/food-retail-expansion-support-health-fresh
- 86. New York City Economic Development Corporation. FRESH (Food Retail Expansion to Support Health). 2013. http://www.nycedc. com/FINANCINGINCENTIVES/TAXEXEMPTIONS/FRESH/Pages/ fresh.aspx.
- 87. Goldman Sachs. 10,000 Small Businesses NYC Food Manufacturers Fund. 2011. http://www.goldmansachs.com/citizenship/10000-small-businesses/US/index.html.
- 88. U.S. Department of Health & Human Services Office of Community Services. Healthy Food Financing Initiative, 2011. http://www.acf. hhs.gov/programs/ocs/resource/healthyfoodfinancinginitiative
- 89. US Department of Health and Human Services. Community Economic Development Healthy Food Financing Initiative Projects, 2013. http://www.acf.hhs.gov/hhsgrantsforecast/index.cfm?switch=grant.view&gff_grants_forecastInfoID=64198
- 90. Low Income Investment Fund. Healthy Food Healthy Communities Fund. 2013. http://www.liifund.org/programs/healthy-food/.

- 91. Capital for Healthy Families and Communities. New York Healthy Food & Healthy Communities Fund, 2013. http://www.liifund.org/ products/community-capital/capital-for-healthy-food/new-york-healthy-food-healthy-communities-fund/
- Community Food Funders. About. 2013. http://www.community-foodfunders.org/.
- 93. Community Food Advocates. Universal School Meals for New York City in 2013. Brooklyn, New York, 2013, p. 10.
- 94. Davidson A. The Food-Truck Stops Here. New York Times Sunday Magazine, May 12, 2013, p. MM16.
- 95. Chartered Institute of Environmental Health. Healthier Catering Commitment. No date. http://www.cieh.org/healthier-catering-commitment.html
- City Council Speaker Christine Quinn. Food Works A Vision to Improve New York City's Food System, New York City Council, 2009, pp. 34-38.
- Mayor's Office of Contract Services. New York State Food Purchasing Guidelines. Revised May 2012. www.nyc.gov/html/mocs/downloads/pdf/New%20York%20State%20Food%20Purchasing%20Guidelines.pdf
- Martin SJ, Andree P. The "Buy Local" Challenge to Institutional Foodservice Corporations in Historical Context. Journal of Agriculture, Food Systems and Community Development 2012;23(8):116–175.
- 99. New York City Council. Finance Division. "Fiscal Year 2010 New York City Budget." Chart. October, 2010. In: New York City Council, Finance Division. Food Works: A Vision to Improve NYC's Food System- One Year Later.; 2011. http://council.nyc.gov/downloads/ pdf/foodworks1.pdf.
- Jackson L. Translating the Diabetes Prevention Program into practice: a review of community interventions. Diabetes Educ. 2009;35(2):309-20.
- 101. PHI Medicaid Redesign Watch. Wage Parity for Home Care Aides. 2012; 1.1:1-8. http://phinational.org/sites/phinational.org/files/ research-report/medicaid-redesign-watch-1.pdf
- 102. Ajala O, English P, Pinkney J. Systematic review and meta-analysis of different dietary approaches to the management of type 2 diabetes. Am J Clin Nutr. 2013;97(3):505-16.
- 103. Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin

- JM, Walker EA, Nathan DM; Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. N Engl J Med. 2002 :346(6):393-403.
- 104. Office of Temporary and Disability Assistance. Caseload Statistics, 2012. http://www.otda.ny.gov/resources/caseload/
- 105. Hanson K, Golan E. Effects of Changes in Food Stamp Expenditures across the U.S. Economy. Food Assistance and Nutrition Research Report 26-6, Economic Research Service, U.S. Department of Agriculture, Washington, DC, August 2002.
- 106. Ludwig DS, Blumenthal SJ, Willett WC. Opportunities to reduce childhood hunger and obesity: restructuring the Supplemental Nutrition Assistance Program (the Food Stamp Program). JAMA. 2012;308(24):2567-8.
- 107. Leung CW, Blumenthal SJ, Hoffnagle EE, Jensen HH, Foerster SB, Nestle M, Cheung LW, Mozaffarian D, Willett C. Associations of food stamp participation with dietary quality and obesity in children. Pediatrics. 2013;131(3):463-7
- 108. Karnik, A., Foster, B. A., Mayer, V., Pratomo, V., McKee, D., Maher, S., Campos, G., & Anderson, M. (2011). Food insecurity and obesity in New York City primary care clinics. Medical Care; 2011:49(7), 65.
- 109. Leung CW, Hoffnagle EE, Lindsay AC, Lofink HE, Hoffman VA, Turrell S, Willett WC, Blumenthal SJ. A qualitative study of diverse experts' views about barriers and strategies to improve the diets and health of Supplemental Nutrition Assistance Program (SNAP) beneficiaries. J Acad Nutr Diet. 2013;113(1):70-6.
- 110. Institute for Children, Poverty and Homelessness. Policy Brief: The Impact of Food Stamp Benefits on Family Homelessness in New York City, New York: 2012. www.icphusa.org/filelibrary/ ICPH_PolicyBrief_TheImpactofFoodStampBenefitsonFamilyHomelessnessinNewYorkCity_Nov2012.pdf
- 111. Food Action and Research Center. SNAP Access in Urban America A City-by-City Snapshot. 2011. http://frac.org/wp-content/uploads/2011/01/urbansnapreport_jan2011.pdf
- 112. Silver L, Bassett MT. Food safety for the 21st century. JAMA 2008; 27;300(8):957-9.